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ABSTRACT

Many Americans share the belief that public education is in crisis; however, a number of researchers have challenged that assumption. This document examines what research reveals about public education in the United States and its students. Further, it distinguishes the areas in which education can affect children from the areas that lie beyond the control of education. Finally, it describes exemplary programs from around the country. The first two chapters offer analyses of SAT scores and achievement test scores in reading, mathematics, social studies, and science. Chapter 3 looks at comparisons between U.S. students and those of other countries. The fourth chapter discusses students attending and completing college, and examines the arguments for and against providing a college education for a large segment of the population. Types of dropout rates and an analysis of them are provided in chapter 5. The sixth and seventh chapters describe the preparation of students for the workplace and the role of the school in dealing with societal problems. The final chapter offers examples of some school programs that emphasize intervention; provide a sense of focus; provide a safe, caring environment; prepare non-college-bound students for careers; and offer integrated services. A four-page Bulletin in Brief, "What's Right with Schools," two tables, and seven figures are included. Contains 45 references. (LMI)

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WHAT'S RIGHT WITH SCHOOLS

Jayne Freeman

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Jayne Freeman

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Preface

Schools in crisis, watered-down curricula, students dropping out, campus violence and drugs, plummeting test scores. We've heard these descriptions of our schools over and over, to the point where they seem almost to represent a common belief about education.

A number of highly respected researchers rise to challenge those assumptions. The Sandia report, a careful study of key issues in education performed by a neutral group in search of the truth, analyzed data from many sources and concluded that past analyses have oversimplified both the problems and the solutions. The researchers report, "To our surprise, on nearly every measure we found steady or slightly improving trends" (Carson and others 1993)

This Bulletin takes a careful look at what research reveals about our schools and our students. Further, it distinguishes the areas in which education can affect children from the areas that lie beyond the control of educators and require a concerted effort by all facets of society to meet the needs of children. Finally, it examines exemplary programs throughout the country.

Jayne Freeman is an education writer and retired teacher. She has published more than twenty articles on a variety of education-related subjects, authored the teachers' guides to two Oregon history textbooks, and served on the editorial consultant board of the *Phi Delta Kappan*.

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Introduction

A ferment of educational reform is sweeping the country, producing new programs, new methods, and new ways of grouping students for instruction. Despite these exciting innovations, the question lingers: How are schools really doing? This Bulletin will analyze the evidence.

Many Things Are Right with Schools

As educators, we know that a lot of wonderful things are happening in schools. Innovations in everything from portfolio assessment to site-based management to cross-age groupings of students create an aura of excitement in schools and school districts. Old problems are being handled in new ways. Schools are capitalizing on new technology and current research to make education relevant and interesting.

Students in a small rural high school in Vermont take Advanced Placement classes via satellite from the University of Oklahoma, discussing their work by calling an 800 number and faxing their tests to their instructor. In one of the rougher neighborhoods of Washington, D.C., 100 percent of Banneker High School graduates are accepted into four-year universities. North Clackamas School District, Oregon, guides its students into the workplace using innovative programs at its Skill Center, with the assistance of more than 400 business partners. The I Have a Dream Foundation in Oregon guarantees a college education to students in three elementary classrooms in Portland.

We know that much is right with our schools. The problem is that the general public seems unaware of our successes and has an unrealistic view of what schools can and should accomplish. Schools have been accused of failing in their primary objective of preparing young people for their roles in society.

Old Criticisms and New

This criticism is not new. As early as 1912, Ella Frances Lynch, writing in the *Ladies Home Journal*, stated,

Imagine a more grossly stupid, a more genuinely asinine system...that not only is absolutely ineffective in its results but also actually harmful in that it throws every year 93 out of every 100 children into the world of action absolutely unfit for the simplest task of life? (Quoted by Berliner 1992)

Almost four decades later, in 1951 *Readers Digest* and the *Scientific Monthly* reported that "the typical high school student could not write a clear English sentence, do simple mathematics, or find common geographical locations such as Boston or New York City" (Berliner, citing Kent 1987).

Although these criticisms are decades old, they sound familiar. We are still hearing them. Today, books and articles herald the "crisis in education." In 1992, for example, *Fortune* magazine printed a special report, "What We Need To Fix U.S. Schools" that referred to America's "badly ailing education systems" (Perry 1992). A 1991 article in *Life* called "Yearning To Learn" is subtitled "Schools are a mess...." It asserts that "millions of American children are obviously failing to learn" (Hirshberg 1991). More recently, Gerald Bracey, research psychologist and *Phi Delta Kappan* research columnist, reports a "flood tide of negative columns, many of them inaccurate," appearing in the *New York Times*, *Rocky Mountain News*, *Washington Post*, and others (Bracey 1993).

Attitudes of the Public

Although education is so often criticized in the press, educators hope that their patrons—parents and community members—feel differently and appreciate what schools are doing to educate their children. In a sense, this is true. The 1994 Gallup poll of the public's attitude toward the public schools, reported in the September 1994 *Phi Delta Kappan*, showed the public is generally satisfied. The top-ranking concerns were violence in the schools, poor discipline, lack of financial support, and drug abuse. Only the first two could be considered responsibilities of the schools.

Following a trend that has continued throughout the twenty-six years of this annual poll, people gave the school attended by their oldest child an average grade of A or B. But when they were asked to evaluate the nation's schools in general, 49 percent gave them a C. The other 51 percent were about evenly split between A-B and D-F.

What Are the Facts?

To what extent are the criticisms and cries of alarm accurate? The fact that they have been heard before leads one to wonder if every generation has the same negative perceptions of its educational system. On the other hand, educating today's youth is clearly a more complex and difficult task than in the past, and perhaps we *are* failing at least some of our children.

Certainly any human endeavor, from mowing the lawn to launching the space shuttle, is capable of improvement. The first step is to differentiate areas in need of correction from those that are actually working well. People refer to a "crisis" in education, but does that crisis actually exist? In what areas are our schools doing a relatively good job, and in what areas is improvement needed? Researchers on both sides of these questions offer a variety of frequently contradictory arguments and evidence to delineate what is actually happening in education today. Who should we believe?

This Bulletin takes up the challenge by analyzing some frequent criticisms of education, and describing programs and areas in which schools are doing remarkably well.

The criticisms examined include the following: SAT test scores are declining due to a failure in the educational system. Our students do poorly on standardized achievement tests because they are not learning basic skills. Our students compare poorly to students in other countries, especially in reading, math, and science. Not enough students go on to college, and those that do are inadequately challenged. The number of students dropping out of school is too high and increasing. Our students are entering the workplace poorly prepared for their careers.

These are the accusations we commonly hear. The pages that follow provide factual information about each one, pros, cons, and areas of uncertainty, so that educators and those involved with schools can speak about them from an informed basis and better understand the nature and extent of the "crisis" in education.

In addition, we will look at some exemplary programs and practices throughout the country, cases where schools and teachers are meeting with unequivocal success.

Chapter 1

SAT Scores

Scholastic Aptitude Tests serve the purpose of predicting individual students' probable success in college, but they are widely used for other purposes. Average scores are used to compare and rank schools, districts, teachers, and states. Careful analysis of SAT scores reveals some surprising information about today's group of test takers.

Perceptions of Average SAT Scores

Probably no other educational statistic engenders as much excitement among the patrons of a school district as the reporting of SAT scores. "Portland Seniors Suffer SAT Setback" was the front-page headline in the Portland *Oregonian* of August 25, 1994. The article expressed alarm at the seventeen-point "plunge" in SAT average scores, saying it indicated a "state-wide performance decline" on the college entrance exams.

Beneath the headline, a diagram depicting the last five years of Portland and statewide Oregon SAT average scores showed that Portland's class of 1993 had averaged 921, a 16-point gain over the average score in 1992, 905. Thus, the 1994 average score of 904 was only one point below that of 1992, and 3 and 2 points, respectively, below those of 1991 and 1990.

Rather than a dramatic drop in scores, the five-year history indicates the 1994 score to be more of a "return to normal," but the headline and subsequent article failed to mention these obvious conclusions except in passing. School Board Chairman Stephen Griffith said, "I think our kids are capable of a lot more." State Superintendent of Public Instruction Norma Paulus made the politically neutral comment that "I can't say I'm not concerned."

The *Oregonian* article referred to the score as "relatively poor." The tone of the headline and article seem typical of the responses from people

across the country, in and out of education, to annual reports of average SAT scores of high school seniors.

The next day the *Oregonian* devoted two articles on the back pages of the paper to a further explanation of the significance of SAT scores in general. These explained that the larger the group taking the test, the lower the average scores, because a larger group will include disproportionately more students from the lower half of their class. However, this particular situation had not occurred with the 1994 class. Fifty-three percent of Portland's 1994 seniors took the SAT, a figure roughly the same as in 1993.

The article did not offer an explanation for the change in average scores. It speculated, and School Board Chairman Griffith concurred in a subsequent interview with the author of this Bulletin, that the reason might simply be the academic composition of this particular graduating class. Research suggests that the average scores might have been depressed by such factors as more ESL (English as a second language) students taking this year's test, or more students from disadvantaged families. Nevertheless, Griffith concluded, "I don't think average verbal scores in the lower 400s and average math scores in the upper 400s should satisfy anyone."

Whether these average scores should mean anything to anyone depends on their interpretation. The intended purpose of the SAT is to predict future college success for a particular student. Compiling averages and using them to rank classes goes against the stated intention of the test. One has to wonder if there is any significance to reporting an *average* score in any one year. Nevertheless, many people seem to feel that lower SAT scores reflect lower standards of education, or poor quality of instruction.

Purpose of the SAT

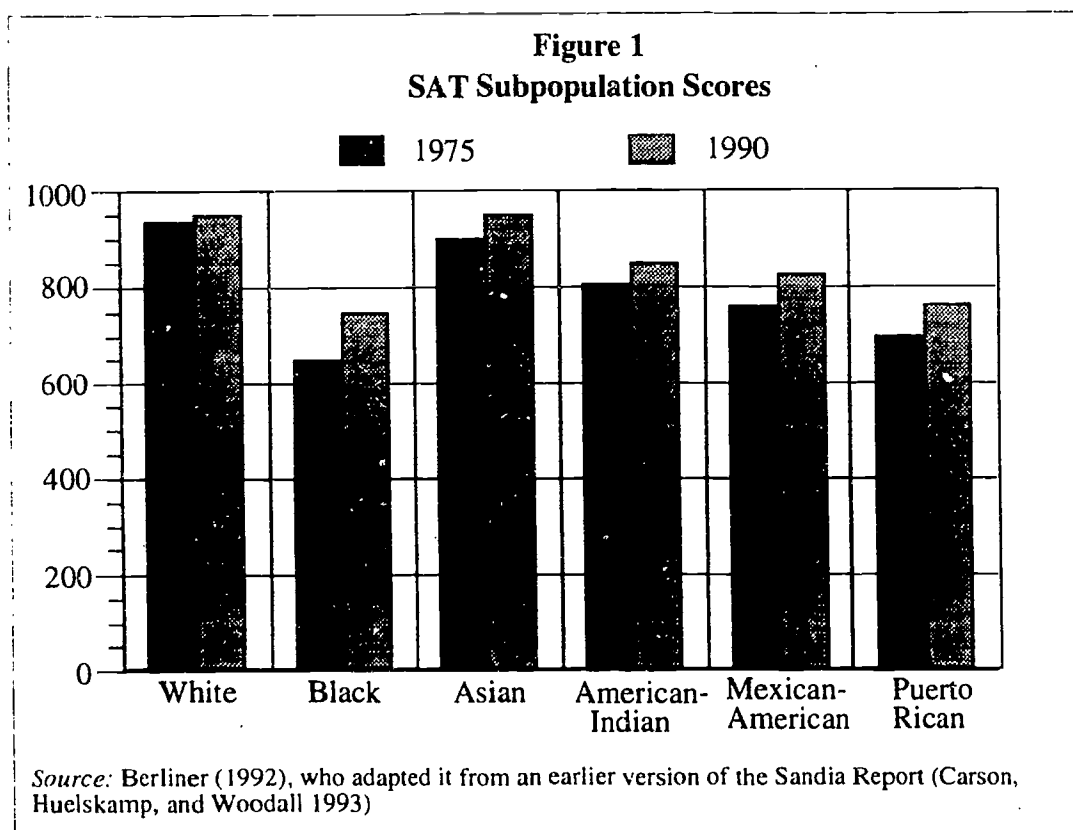
The Educational Testing Service, the people who compose, score, norm, and assess the SAT, reminds us that the function of these tests is to predict the probable success in college of each member of the test group. They are not intended to be used to rank students, schools, districts, or states, even though they are all too commonly used for those purposes. Even the former U.S. Secretary of Education, William Bennett, in his "Report Card on American Education 1993" (reported by Houston and Schneider 1994), ranked states according to the SAT scores achieved by their students. "Despite repeated disclaimers by the developers of these tests, and admonitions from every testing expert we know, Bill Bennett wants the public and the press to continue to regard these tests as measures of what schools teach and what students learn. In fact, the examinations are designed only to predict freshman success in college" (Houston and Schneider 1994).

Amount of Decline in SAT Scores Since 1965

Across the country, one hears concern about a national plunge in SAT scores and the implication that this is due to a corresponding national plunge in the quality of education. What are the facts? David Berliner, professor of education at Arizona State University, says the decline "has been only 3.3 percent of the raw score total, about five fewer items answered correctly over twenty-five years." He suggests that "far from being ashamed of this loss, educators should celebrate it. Why? Because it is explainable by the fact that much greater numbers of students in the bottom 60% of their graduating class have been taking the SAT since the '60's" (1993).

Rise in Average Scores of Ethnic Subgroups

Studies of student populations taking the SAT reveal that even though average scores nationwide have declined slightly over the last twenty years, the scores of the varying ethnic groups taking the test have gone up. This rise in scores is true for every group taking the test during that period (Carson, Huelkamp, and Woodall 1993). Figure 1 compares 1975 SAT scores for white, black, Asian, American-Indian, Mexican-American, and Puerto Rican subpopulations with each group's average 1990 SAT score.



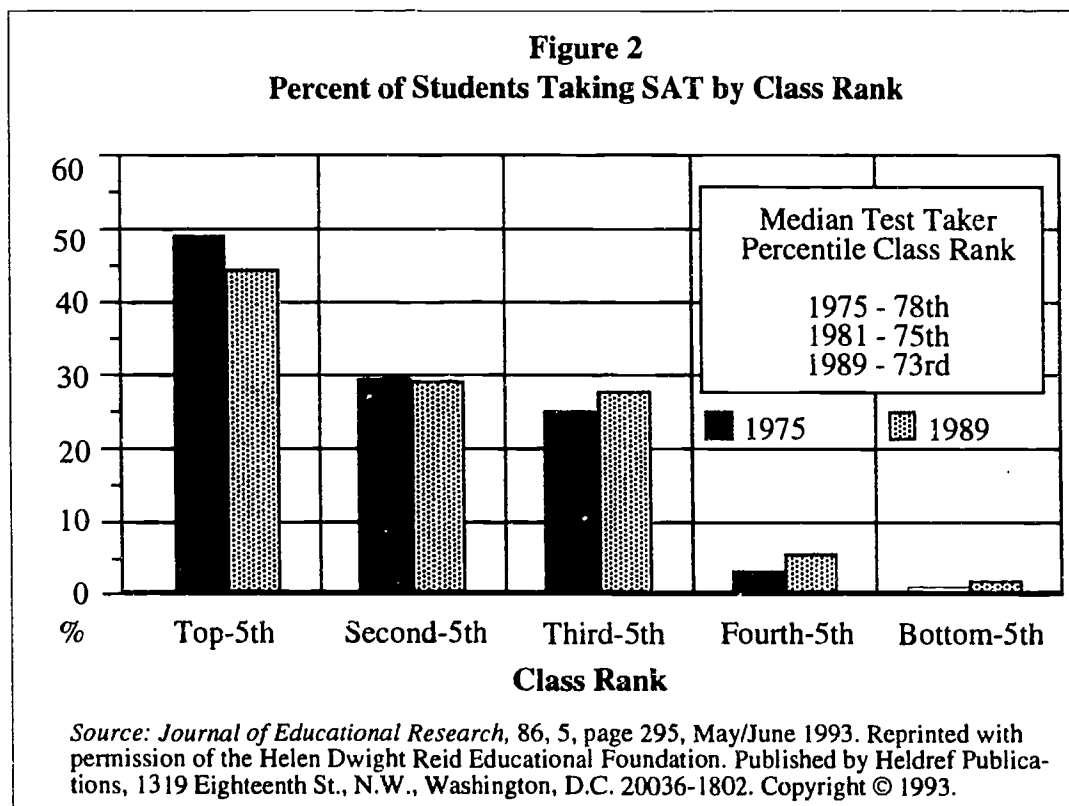
This chart raises an interesting question. If the scores for each group taking the test have gone up, how can the scores of the group as a whole have declined? This is explained by the composition and numbers of the group of test takers.

Change in Composition and Numbers of Group Taking Test

As figure 2 shows, the demographics of the students taking the SAT changed significantly from 1975 to 1989. During this period, a larger percentage of graduating seniors attempted the SAT, but fewer of them were in the top 20 percent of their class. At the same time, more students in the lower 60 percent of their class took the test. These results have produced lower average scores. If more C students take SATs, the average score is bound to drop.

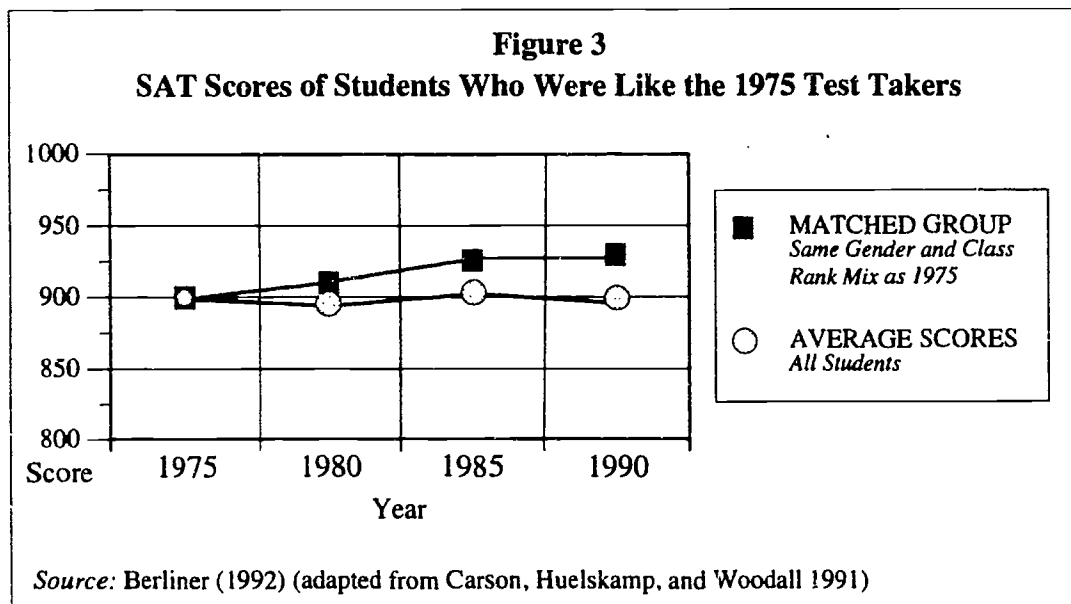
Researchers at the Sandia Laboratories prepared figure 2 as part of a detailed analysis of American education. Their report is especially significant because it was conducted by a research group with no ties to education.

“Because Sandia conducts scientific research for the U.S. government, we have a keen interest in the education system that develops future scientists, engineers and mathematicians” (Huelskamp 1993). The Sandia report has not been welcomed in some circles, perhaps because most of the results are favorable to education. As of the date of this Bulletin, the report has not



been formally published, though the findings were presented to Congress and printed in *Journal of Educational Research* (Carson, Huelskamp, and Woodall 1993). As a matter of fact, the Sandia report was ranked number three in Project Censored's list of the top-ten censored stories of 1993, with the comment, "This report was suppressed by the Bush administration and virtually ignored by the mainstream media because it challenged the widespread view that public schools are self destructing" (Bracey 1993).

In analyzing SAT scores, the Sandia researchers selected from those who took the SATs in 1990 a group comprised of all students of the same gender distribution and relative class rankings as those who took the test in



1975. When they directly compared these two groups, the average score for 1990 was more than 30 points higher than for 1975. As can be seen in figure 3, the difference is remarkable.

The Sandia report cautions against reading these figures as absolutes, because the improved scores may be due to improved test preparation or other nonaptitude factors. The researchers concluded, "The issue of student performance on the SAT is far too complex to be discussed in terms of decline or improvements in average scores" (Carson and others 1993).

Berliner, however, wants to give credit to schools and educators:

What makes this group of college bound high-achievers so much better than their 1975 peers? Is it cleaner air or water? Improved diet or exercise? I believe a good candidate for the credit is the continuous improvement of the schools they attend. What adds more to my pride is that Educational Testing Service, the developers of the test items for the SAT, has admitted that the SAT today is more difficult than it was in 1975. (Berliner 1992)

Correlation Between Per-Pupil Expenditures and SAT Scores

In his "Report Card on American Education 1993," former U.S. Secretary of Education William Bennett "purports to show which states are most effective at educating students" (Houston and Schneider 1994). He points out that the highest achieving states tended to be those that don't invest heavily in education, and concludes that "there is no correlation between increased spending on education and higher student achievement" (Houston and Schneider). On the other hand, he acknowledges that "money aside, if a high percentage of students take the test, then the group is going to include a lot of noncollege-bound 'C' students who will bring down the composite score" (Houston and Schneider). According to Houston and Schneider, he cannot have it both ways:

If what we want as a society is high SAT scores, then all we have to do is deny low-income students access to the test. On the other hand, if we want large numbers of students to take the test and do well on it, then we're probably talking about major boosts in public spending to help low-income students overcome the disadvantages associated with their economic plight.

In his ranking of states, Bennett fails to factor in such variables as percentage of students taking the test; number of children in poverty (the single best predictor of how well a student will do on the SAT); number of children who reside in single-parent households; number of unmarried teenage parents; and number of students with limited proficiency in English (Houston and Schneider).

Bennett's "top ten" states have high per-capita incomes, a factor that

Figure 4
Bennett's "Top 10 Achieving States"

	Ranking by SAT Scores	Ranking by Percentage of Seniors Taking SAT	Ranking by Number of Students in Poverty
Iowa	1	49	49
N. Dakota	2	46	32
Minnesota	5	39	29
Nebraska	8	39	47
Wisconsin	7	39	30
Idaho	21	30	26
Utah	4	50	22
Wyoming	22	33	50
Kansas	6	42	37
S. Dakota	3	46	30

Source: Paul Houston and Joe Schneider (1994)

correlates consistently with high SAT scores. They also have "low numbers not only of children in poverty but also of single-parent households, single teen parents, and students with limited proficiency in English" (Houston and Schneider). In Bennett's top 10 states, an average of 9 percent of high school seniors take the SAT, whereas in the ten highest spending states, nearly 66 percent of high school seniors take the test.

SAT Scores Reflect a Changing Society

David Berliner suggests that the decline in SAT scores since 1965 could be attributed to some fundamental changes in society:

Between the changes in the population taking the test and a changed pattern of child rearing because of TV, the decline... in SAT performance seems perfectly reasonable and not easily attributable to inadequate teachers or a failing school system. (Berliner 1992)

He suggests further that the SAT might be revised to reflect changes in the way students now process information. For example, tests might require students to decode information from complex audiovisual displays or recall information presented in auditory or visual form rather than simply print media.

As long as the United States has universal education as a national goal and, more than any other country in the world, encourage students to enter postsecondary education, SAT scores will continue to reflect a slice of the general pie that includes many students in the lower half of their classes.

Achievement Test Scores in Reading, Math, Social Studies, and Science

Analyses of standardized test results comparing students of today with those of earlier periods indicate that today's students know about as much as earlier generations. Some people feel that, given today's rapidly changing, technological society, students should be doing better.

Standardized Test Results

The Sandia report (Carson, Huelskamp, and Woodall 1993) analyzed the results of the National Assessment of Educational Progress, which is a set of examinations in math, science, reading, writing, geography and computer skills, given nationwide every two years to nine-, thirteen-, and seventeen-year olds. The analysis indicates that students today know about as much in these areas as did students twenty years ago. Some gains in reading and math have been made by black and Hispanic students, while scores for white students remain about the same.

As the NAEP scores listed in table 1 reveal, the tested populations made remarkably steady gains in reading and math during the seventies and eighties.

Gerald Bracey (1992) reports on an analysis of test data in Iowa, where a testing program has been in place since 1934. Scores on the Iowa Tests of Basic Skills fell in the late sixties and early seventies, then rose again until in 1991 scores among students in grades 3-7 were at all-time highs and grade 8 scores were close to that.

Bracey also reports that, in the same year (1991), scores on the Iowa Tests of Educational Development for grades 9, 10, and 11 were at an all-

Table 1
Selected NAEP Scores in Reading and Math

Reading Scores

- in 1971, nine-year-olds scored 207.3
- in 1988, nine-year-olds scored 211.8
- in 1971, thirteen-year-olds scored 255.2
- in 1988, thirteen-year-olds scored 257.5
- in 1971 seventeen-year-olds scored 285.4
- in 1988 seventeen-year-olds scored 290.1

Math Scores

- in 1973, nine-year-olds scored 219.1
- in 1986, nine-year-olds scored 221.7
- in 1973, thirteen-year-olds scored 266
- in 1986 thirteen-year-olds scored 269
- in 1973 seventeen year olds scored 304.4
- in 1986 seventeen year olds scored 302.0
(the only decline in math scores)

Source: Carson and others (1993)

time high, and grade 12 scores neared a record high. This is significant because "while the ITBS measures 'basic skills,' the ITED is a difficult test. Thus one cannot make the argument that children are learning 'the basics' at the expense of higher-order skills" (1993). Bracey states that this trend appears to be nationwide for this test.

He also cites a study by Carl Kaestle and colleagues, who reviewed many then-and-now reading studies and found, despite design and interpretation problems, that "school children of the same age and socioeconomic status have been performing at similar levels throughout most of the twentieth century."

Test scores in science do not reveal such encouraging results. Nine-year-olds scored about the same in 1970 and 1986, but the scores of thirteen-year-olds declined from 254.9 in 1970 to 251.4 in 1986. Seventeen-year-olds showed an even further drop, from 304.8 in 1970 to 288.5 in 1986 (Denoyer 1992).

An interesting sidelight to this decline in science scores is a report on the effect of testing on science instruction. A \$1 million study performed by George F. Madaus at Boston College for the National Science Foundation concluded that standardized science tests have a detrimental effect on science teaching, particularly in schools with high minority enrollments. The study found that teachers feel pressured to help students perform well on these tests because evaluations of teachers and schools are so often based on test scores. Teachers therefore tend to teach to the tests, which emphasize rote memorization and the application of routine formulas, instead of emphasizing problem solving, reasoning and other science skills encouraged by curriculum experts ("Tests Flunk, Study Finds" 1992).

Effect of Renorming of Standardized Tests

Evaluation of standardized tests used by school districts throughout the country, such as the California Achievement Test and the Iowa Test of Basic Skills, is complicated by the fact that these tests are renormed on a seven-year cycle, and each norm is "harder" than the previous one, so that students have to score higher to stay in the same percentiles. Berliner looked at the scores within a norming period of seven years. He concluded that "in both reading and mathematics we find meaningful annual gains in percentile ranks from one representative norming sample to the next" (Berliner 1992).

Berliner also states:

Today's youth is scoring about one standard deviation higher than their parents did when they took the test. We can estimate that around eighty-five percent of today's public school students score higher on standardized tests of achievement than their average parent did. But the high-jump bar keeps getting higher, and it takes a higher jump today than it did around 1965 to hit the fiftieth percentile. (Berliner 1992)

Criticisms of What Our Students Know

Even though our students are doing about as well as they always have, the question must be asked if this is good enough. As society and its needs have changed, shouldn't our students be meeting higher expectations? At least four researchers think they should. Diane Ravitch and Chester Finn conclude in their 1987 book *What Do Our 17-Year-Olds Know?* that eleventh graders are woefully ignorant of American history and literature. Similar conclusions are reached in E.D. Hirsch's *Cultural Literacy* (1987), Alan Bloom's *The Closing of the American Mind* (1987), and William Bennett's *To Reclaim a Legacy* (1984). Bracey agrees to the extent that "anecdotally speaking, Americans' ignorance of history and geography is legendary. Surely it is nothing to be proud of, but there appears to be no slippage" (Bracey 1992).

Dale Whittington (1992) conducted a rigorous analysis of Ravitch and Finn's data and concluded that their test design guaranteed low scores. They set the pass/fail score at 60 percent and used norm-referenced items that half of all test takers normally get wrong. Whittington's own review of student achievement in American history in 1917, 1933, 1944, and 1964, based on items that were the same in each year, showed that students today know about the same amount of American history as they did in the past. However, no one is suggesting that this level of knowledge is adequate.

Reliance on Standardized Test Results

Relying solely on standardized test results to evaluate how students are doing can lead to misconceptions. Standardized tests are generally short-answer, multiple-choice, fact-based examinations. They do not evaluate some important areas of knowledge such as creativity, abstract reasoning, composition skills, and organizational and higher level thinking skills. Michael Kirst, professor of education at Stanford, comments that

commonly used multiple-choice tests are excessively oriented to low-level, basic skills that inappropriately emphasize single right answers. Moreover, local education agencies tend to choose commercial tests that do not adequately emphasize analysis, statistical inference, mathematical problem solving, experimental science, synthesis, expository writing and complex reading. (1992)

Standardized tests also have the drawbacks mentioned in the science study above. If their results are misused, teachers can feel obliged or pressured to teach to the tests, which then create the curriculum rather than evaluate it. For these reasons, many school districts throughout the country are experimenting with performance-based evaluation, including portfolios and other alternative assessment methods, which, though cumbersome, may provide a clearer picture of individual students' progress.

A recent study by Glen Robinson and David Brandon of the Educational Research Service concludes that variations in state NAEP scores can be accounted for almost entirely by demographic variables. Robinson and Brandon (1992) looked at four variables: number of parents in the home; level of parental education, type of community, and state poverty rates for ages five to seventeen. They concluded that these four factors account for 89 percent of the variation of NAEP scores by state.

Even if one accepts standardized test results at face value, it is still not possible to say, "We're doing fine." At best, these tests indicate that most of our students are performing as well or slightly better than they ever have.

Throughout the country some communities, particularly in urban innercities and remote rural areas, continue to produce more than their share of students who test low, are functionally illiterate and have a variety of educational and societal problems. Jonathan Kozol in his book *Savage Inequalities* (1991) paints an ugly picture of the worst levels to which education (and society) can sink: schools without textbooks, furniture, or basic supplies, with drug-affected students and indifferent or despairing teachers. Even though the general picture is rosy, we must not neglect those pockets of despair that so urgently need all the help they can get, not only from education but from society itself. Hungry, drug-affected children are not in a position to learn.

Comparisons Between U.S. Students and Those of Other Countries

Students in other industrialized countries generally score higher than American students on tests of reading, math, and science. However, the Educational Testing Service warns against using international test results for comparisons, due to differences between cultures, timing of instruction, and other factors. Do we really want to imitate Japanese schools?

Comparisons of International Tests

Problems of Democracy is a course for seniors at Old Orchard Beach high school in Old Orchard Beach, Maine. Not long ago, students in this class were engaged in a lively discussion about the second Rodney King trial. Questions included, "Whose advocate is the press in the article reporting the trial?" "How might politicians in this area best handle criticism?" "Whose side are the police on?" Visiting that classroom, Mary Ann Horenstein reported that "the room was alive with thoughtful excitement" (Horenstein 1993). In a biology class at the same school, the teacher told a student, "Don't tell me what it says in the book, or you'll never learn to think."

In contrast, Robert Everhart, dean of education at Portland State University, reports on visiting a number of Japanese schools. "In many of them, the teacher comes to the front of the classroom, opens a textbook and starts reading from the text. That's the lesson" (Everhart, interview 1994).

As parents and educators, we are almost automatically drawn to a description of thoughtful, interactive education such as is found in Old

Orchard High School. What seems puzzling are the results of tests comparing American and Japanese students. Scores comparing standardized tests administered to same-age pupils in the U.S and industrialized countries like Japan and Germany have, in recent years, placed Americans at an apparent disadvantage. For example, in February 1992, the Educational Testing Service released the findings of the Second International Assessment of Educational Progress. The results of this assessment placed American thirteen-year-olds in fourteenth out of fifteen places in science, and thirteenth in math.

Interpretation of Test Results

These are dismayingly low scores. Of course we want our students to be among the best in the world. Why are they ranking so low?

At the time ETS released the findings mentioned above, it cautioned against using the test results for international comparisons, stating that the samples were not comparable due to cultural and other differences, and results should not be used to rank nations.

Gerald Bracey (1992) discusses the difficulty of comparing test scores from cultures that are significantly different from each other:

The IAEP-2 was the most sophisticated study to date, . . . yet Rotberg has pointed out that the people who conduct these studies are very much aware of the problems; they simply haven't been able to solve them. The problems are beyond the reach of sophisticated research design. Shanker and others have concluded that 20 years worth of studies showing American students finishing poorly can't be wrong. Rotberg has observed that the consistency of the findings means that all the studies have the same shortcomings. (Bracey 1992)

What are these shortcomings? The most obvious is the area of educational structure. Comparing the American and Japanese classrooms described in the first paragraph of this chapter would be close to impossible. Everhart says such comparisons are like comparing apples and fruit cocktail. Each class is typical of its culture and represents in microcosm the educational philosophy of its society. Philosophies of education, curricula, and ways of grouping students for instruction vary widely among nations. Some Japanese instructional methods may favor the short-answer kind of thinking that occurs on standardized tests.

Early Tracking Versus General Education

In many of the countries scoring high on standardized assessments, students are tracked at an early age, ten or eleven, into college preparatory and vocational programs. Thirteen-year-olds tested in those countries would

be from the college-prep tracks, an elite group, compared to our test population, which includes thirteen-year-olds of all abilities.

Effect of Longer Hours of Schooling

The number of hours of schooling is another area of difference between the U.S and several other countries, most notably Japan. Japanese students attend school more days per year than their American counterparts. They also have more hours of study, homework, and afterschool and Saturday schools. This means that Japanese students at any age have more hours of instruction and practice in a given subject than their American counterparts the same age.

In addition, the whole picture of Japanese education appears more rigorous than its American counterpart. Rohlen (1986) compares Japanese and American education on the following dimensions:

- Total education expenditure as percentage of GNP
Japan 6 percent U.S. 7 percent
- Four-year-olds attending school
Japan 63 percent U.S. 32 percent
- Students graduating from twelfth grade
Japan 90 percent U.S. 77 percent
- Average daily hours of homework in high school
Japan 2.0 U.S. .5
- Daily absentee rate
Japan very low U.S. 9 percent
- Years required of high school mathematics
Japan 3 Typical U.S. 1
- Years required of foreign language (grades 7-12)
Japan 6 U.S. 0-2
- Engineering majors in undergraduate population
Japan 20 percent U.S. 5 percent

Shouldn't we follow this model? Surely our students would learn more if we were to lengthen our school day, lengthen our school year, require more math and foreign language, and give our students several hours of homework per evening. A wide variety of literature suggests that we should do exactly that in order to remain competitive in the world marketplace.

On the other hand, our American vision of what childhood includes a large amount of nonacademic time, time spent in recreation, in sports, in learning to play a musical instrument or marching in a band, taking ballet

lessons or belonging to a dance team, in summer travel and afterschool jobs.

Most of those activities would have to be curtailed to attain the goals of spending more time on school and studies. To do this would be a little like becoming Cinderella's stepsister, trying to fit our cultural feet into the glass slipper of Japanese competitiveness and elitism. Parents would have to groom their children as early as age three or four for a lifestyle of vigorous academic preparation. It remains a national choice we can make, but are we truly willing to pay the price?

Differences in Timing of Instruction

Because in the United States over 50 percent of high school graduates go on to college, we tend to take a longer time to introduce and teach some subjects. For example, we generally defer calculus until college. In countries like Germany, where the majority of students end their education at high school, algebra, calculus, and other subjects are offered at an earlier level. Thus, on tests of algebra at eighth grade, those American students who have not yet studied algebra (generally a high school subject in the U.S.) will do less well than their foreign counterparts.

Some Encouraging Test Results

Not all tests comparing American students with those of other countries show our students at a disadvantage. In 1992 a largely unheralded test administered by the International Association for the Evaluation of Educational Achievement compared reading skills of 200,000 students in 31 countries. American nine-year-olds ranked second on this test, with Finland taking first place. American fourteen-year-olds ranked ninth, still well in the upper half of the group.

In his "Fourth Report on the Condition of Public Education," Bracey (1994) reports an intriguing analysis of National Assessment of Educational Progress test data performed by the National Center for Education Statistics, which compared the results of the IAEP-2 math test using NAEP scales. The following ranks and scores are obtained:

Top Finishers

1. Asian U.S. Students	287
2. Taiwan	285
3. Korea	283
4. Advantaged urban U.S. students	283
5. White U.S. students	277
6. Hungary	277

Bracey concludes, "Thus, the great majority of American students finish at or near the top of the most recent international comparison in mathematics, a subject in which our national performance is reported to be dismal. Whites and Asians together make up over 70% of the K-12 population of U.S. schools."

The Second International Mathematics Assessment of eighth-grade students has been analyzed by Ian Westbury in terms of the scores of students in the top and bottom halves of classes in the U.S. and Japan. Students in the top half of regular math classes averaged a score of 60. In enriched classes, the top half averaged 67 and in algebra classes 76. This compares to an average of 66 for Japanese students in the top half of their math classes. Bracey comments on these data: "Thus, within each country, classes that finished in the top half of all classes appear comparable.... American students taking algebra scored above the Japanese average" (Bracey 1993).

Everhart, in my interview with him, spoke at length on these same data:

The top 50 percent of American students actually outperform the Japanese on international tests of math and science. The bottom 50 percent of Japanese students don't score much worse than the top 50 percent of Japanese students, but the bottom 50 percent of American students is far worse than the top 50 percent. And therein lies the real problem in terms of test scores... because what we have in our country is wide variance in terms of student ability as indicated on test scores. You have what seems to be a very well prepared top half and a very ill prepared bottom half, which of course brings the average down. In Japan you don't have that kind of variance.

So when you say Japanese students are outperforming American students, what you really ought to say is that Japanese students in the bottom half are outperforming the bottom half of American students. In reality the top half of American students are outperforming the top half of Japanese students.

Differences Between U.S. and Japanese Cultural Values

Comparisons of American students with those from other countries, especially Asian countries, frequently do not take into account cultural differences. Some of these differences are so extreme and so permeating that they may negate international comparisons.

A bulletin published by the Educational Research Service on perceptions of American education states:

A basic problem with international test score comparisons is that, despite similar general characteristics that two or more education systems may share, the countries' cultural values and social structures

strongly affect the educational challenges, outcomes and delivery system in each country.... Simply copying the educational system of another country is unlikely to be successful in a country with a substantially different culture and population. (Robinson and Brandon 1992)

The cultural differences between the U.S. and Japan are substantial. The contrast in lifestyles is bound to affect how children learn in each society. For instance, in Japan, fewer than 6 percent of students live in single-parent families, compared with more than 25 percent in the U.S. Richard Jaeger (1992) finds a close negative connection between school achievement and single-parent households. "The percentage of children living in single-parent households predicts almost one-third of the variance in mean algebra scores among 13-year-olds in the Second International Mathematics Study.... Childhood involvement in divorce shows similar predictive power with regard to students' mean arithmetic scores."

Individuality Versus Rote Learning

Japanese and American educational systems and philosophies are fundamentally different in how they view personal choice. Our culture and schools prize creativity and individuality. Morley Young, who taught English in Japan, describes the educational system there as narrow and repressive. "Japanese education is harsh, and discipline is severe. Nowhere else is the old Japanese adage, 'The nail that sticks up gets pounded down' applied more strictly than in the schools" (Young 1993).

Corporal punishment, shame, and rote learning are common practices in Japanese schools, extending even to the college level. Young found that when he questioned the university students he taught, they invariably responded with rote answers rather than thinking for themselves.

Ethnic Diversity

Japan is an ethnically homogenous country, historically suspicious of foreign influences. As Bracey notes,

All of the students in Japanese schools are ethnic Japanese. Virtually all the children in Finnish schools are ethnic Finns. In the U.S., large districts strive to teach students who speak as many as 108 languages other than English in their native tongues. (October 1993)

Robinson and Brandon concur:

The valuing of ethnic diversity and personal freedom creates educational challenges for American schools that require a broader spectrum of learning opportunities for students than required in the more uniform Japanese society. (1992)

The Other Side of the Issue: Our Students Do Score Lower

While the differences in culture and educational structure described above *explain* the low ranking of American students on some international tests, they do not necessarily *justify* these results. A number of researchers believe we can and should do better.

Chief among those who believe that American schools are lagging far behind their Asian counterparts is Harold Stevenson, professor of psychology at the Center for Human Growth and Development at the University of Michigan. Stevenson and his research group have conducted a number of international studies in which they tried to balance the students from different countries in terms of curriculum and sampling procedures. "We devised our own tests in reading and mathematics on the basis of detailed analyses of the textbooks used by the children we studied.... We chose locations where there is universal elementary school education and where we could apply the same sampling procedures" (Stevenson 1993).

Stevenson tested several hundred fifth graders in Minneapolis; Taipei, China; and Sendai, Japan, in 1980, 1984, and 1990, administering tests in reading and mathematics. The results appear to consistently rank the Asian students higher in mathematics. In reading, American students tested second to the Chinese but above the Japanese in 1980, but by 1990 they had slipped to third place.

Stevenson also tested kindergarten students and students at grades 1, 3, 5, and 11 and concluded that Japanese and Chinese students consistently excelled.

Aware of extreme differences in reading and writing systems, he reported:

Comparing reading scores is more difficult when the writing systems, grammar and content of textbooks differ. Nevertheless, when students were tested with words that were at-grade or below (words they had studied in their readers), Chinese and Japanese students outscored Americans.

"Clearly," Stephenson concludes, "an achievement gap exists between American and Asian students. Part of the reason for this gap is that American students, their parents and their teachers maintain unnecessarily low standards for performance." Teachers are the key to raising these standards, he suggests. Their role should be restructured to provide time for helping individual students and for professional learning opportunities (Stevenson 1993a).

Gerald Bracey takes issue with Stevenson's methodology and conclusions, labeling them "sweeping generalizations and simplistic recommendations" (1993). After criticizing Stevenson's sampling techniques, Bracey

states, "The greatest weakness of Stevenson's research, though, is that it does not examine the entire education system.... Schools exist within a culture. To glorify Asian schools without picking up the rest of the cultural baggage is like trying to graft a vine onto a concrete wall" (Bracey, February 1993).

Stevenson responds: "American schools are in trouble.... The question is whether we are graduating all of our citizens so that they can be competitive with their peers in other advanced countries" (Stevenson 1993b).

Rohlen (1985/86) proposes that we adopt some, but not all, of Japan's educational structure. He recommends the setting of minimum national educational standards (not a national curriculum):

Minimum national standards are hardly a panacea, or a substitute for good teaching, but they can assist the overall effort to improve our schools by regularly marking and focusing attention on the many problems currently hidden by our willingness to give diplomas without assuming responsibility for what they represent. (Rohlen)

He also recommends teaching orderly behavior early in school, and having a system of entrance exams for high schools in which the programs offered vary by different occupational goals. He concludes, "We would be foolish to see Japanese education as a model for our own efforts, but as a mirror showing us our weaknesses and as a yardstick against which to measure our efforts, it has great value for us."

The debate over international comparisons is a lively one, with much to ponder on both sides. No doubt it will continue to engage us for some time in the future as we try to balance our cultural values and our academic aspirations for our children.

Students Attending and Completing College

About one-fourth of U.S. high school graduates go to college and receive a bachelor's degree. Most other industrialized countries do not offer a college education to all who seek it. Arguments have been made that educating large numbers of students waters down the quality of a university education. On the other hand, Frohnmeyer and others argue that in the near future more jobs will require a college degree.

U.S. College Numbers Highest in the World

The Sandia report finds that nearly 60 percent of high school graduates attempt some form of postsecondary studies, and about 26 percent receive a bachelor's degree. These rates are the highest in the world by a considerable amount. In most other developed nations, including Japan, France, and England, only 10-15 percent of high school graduates receive university training.

Since 1965, the number of college students in the United States increased from five million to about thirteen million. Here are some other interesting statistics about our college population:

- Eighty-three percent of college students are commuters.
- Forty-two percent are twenty-five years of age or older.
- Over 25 percent of undergraduates hold full-time jobs.
- Almost a million bachelor's degrees are granted each year and about 300,000 master's degrees. (Carson, Huelskamp, and Woodall 1993)

Financial and Curricular Implications of Educating Large Numbers of Students Beyond High School

Because in the United States large numbers of students attend college, education can be thought of as a sixteen-year rather than a twelve-year process. This longer continuum has both curricular and financial effects, especially when the U.S. is compared with other countries.

As mentioned in the previous chapter, subjects such as calculus are frequently deferred from high school to college in the U.S. This difference between education in the U.S. and other countries makes it difficult to compare the achievement of high school students in those areas of math and science that U.S. students have not studied at the time of testing.

Financing of education is also frequently analyzed on a sixteen-year rather than a twelve-year basis, because such a large proportion of our students go on to college. If the total per-pupil expenditures for students in U.S. and foreign countries are compared, the U.S. appears to be a high-spending country when the figures include postsecondary education for our students. In comparisons including kindergarten through college, the United States is tied with Sweden as one of the highest spending countries. Where K-12 comparisons are made, the U.S. ranks ninth among sixteen industrialized nations—14 percent below Germany, 30 percent below Japan, and 51 percent below Switzerland (Berliner 1992).

Arguments for Educating an Elite

It is clear that in the United States a great deal of money and effort are expended in offering higher education opportunities to as many students as possible, in keeping with our national egalitarian ideals. Recently this policy has come into question in a book titled *In Defense of Elitism* by William A. Henry III (1994).

Henry argues that the costs of American higher education are not justified by the outcomes. "The total bill for higher education is about \$150 billion per year, with almost two-thirds of that spent by public institutions run with taxpayer funds" (Henry 1994). While granting that college graduates earn from one-and-one-half to three times the income of those without a degree, Henry believes that colleges are turning out more graduates than the workplace requires. He accuses American society of succumbing to the Lake Wobegone theory of higher education, the idea that everyone who graduates from college will be "above average" in the sense that everyone will be a manager or professional. Wages for these office workers are declining, he states, and, additionally, many college graduates do not find employment in the areas for which they are educated or qualified.

BULLETIN IN BRIEF

OREGON SCHOOL STUDY COUNCIL

Condensed from OSSC Bulletin

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What's Right with Schools

By Jayne Freeman

Although many wonderful things are happening in public schools, the average citizen seems to have a generally negative view of education. Schools have been accused of failing in their primary objective of preparing young people for their roles in society. Evidence issuing from current research, however, paints a more optimistic picture of the status of education today. Here are the facts.

SAT SCORES

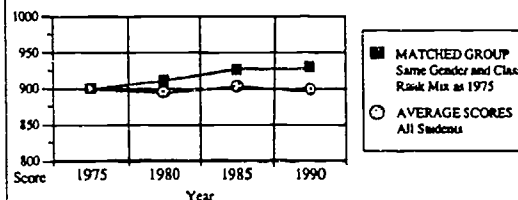
Average Scholastic Aptitude Test scores are frequently reported in the media as if they showed advances or declines in the quality of education, though these tests are designed solely to predict each individual student's success in college. Careful analysis of SAT test score data reveals some surprising information.

Instead of plummeting, the average raw SAT score, nationwide, has declined only about 3.3 percent since 1965. More recently, average scores have dropped from 940 in the seventies to slightly more than 900 in 1992. Moreover, studies of student populations taking the SAT reveal that scores

of the varying ethnic groups taking the test have gone up for every group taking the test during that period.

The apparent overall decline in scores from 1975 to 1989 is explained by changes in the demographics of students taking the SAT. During this period, a larger percentage of graduating seniors attempted the SAT, but fewer of them were in the

SAT Scores of Students Who Were Like the 1975 Test Takers



Source: Berliner (1992) (adapted from Carson, Huckkamp, and Woodall 1991)

top 20 percent of their classes. At the same time, more students in the lower 60 percent of their classes took the test. These results have produced lower average scores. If more C students take SATs, the average score is bound to drop.

Researchers at the Sandia Laboratories selected from students who took the SATs in 1990 a group having the same gender distribution and relative class rankings as those who took the test in 1975. When they compared these two groups, the average score for 1990 was more than 30 points higher than for 1975 (see the accompanying figure) (Carson and others 1993).

David Berliner, a professor at Arizona State University, attributes the decline in SAT scores since 1965 to some fundamental changes in society. Because of these changes, the decline "in SAT

The Oregon School Study Council—an organization of member school districts in the state—is a service of the College of Education, University of Oregon.

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performance seems perfectly reasonable and not easily attributable to inadequate teachers or a failing school system" (1992).

ACHIEVEMENT TEST SCORES

Analyses of standardized test results comparing students of today with those of earlier periods indicate that today's students know about as much as earlier generations. However, some people feel that, given today's rapidly changing, technological society, students should be doing better.

Carson and others (1993) analyzed the results of the National Assessment of Educational Progress—examinations in math, science, reading, writing, geography, and computer skills—given nationwide every two years to nine-, thirteen-, and seventeen-year-olds. The analysis indicates that students today know about as much in these areas as students did twenty years ago. Some gains in reading and math have been made by black and Hispanic students, while scores for white students remain about the same.

Evaluation of standardized tests used by school districts throughout the country is complicated by the fact that these tests are renormed on a seven-year cycle, and each norm is "harder" than the previous one, so that students have to score higher to stay in the same percentiles.

Michael Kirst, professor of education at Stanford University, comments that "commonly used multiple-choice tests are excessively oriented to low-level, basic skills that inappropriately emphasize single right answers." Most commercial tests "do not adequately emphasize analysis, statistical inference, mathematical problem solving, experimental science, synthesis, expository writing and complex reading" (1992). The move to portfolios and other methods of alternative assessment is a response to this problem.

COMPARISON OF U.S. STUDENTS TO THOSE IN OTHER COUNTRIES

The results of the 1991 Second International Assessment of Educational Progress placed American thirteen-year-olds in fourteenth out of fifteen places in science, and thirteenth in math. However, the Educational Testing Service warns against using international test results for comparisons,

due to differences between cultures, timing of instruction, and other factors.

In many countries, students are tracked at an early age—10 or 11—into college preparatory or vocational programs. Thirteen-year-olds tested in those countries would be from the college-prep tracks, an elite group, compared to our test population, which includes thirteen-year-olds of all abilities.

Effect of Longer Hours of Schooling

The number of hours of schooling is another area of difference between the U.S. and other countries, especially Japan. Japanese students at any age have more hours of instruction and practice in a given subject than their American counterparts at the same age.

Some authorities suggest that we should provide more hours per day and days per year of education and increase daily homework assignments. On the other hand, most Americans want their children to have time for play, sports, music, summer travel, and afterschool jobs. Many of those activities would have to be sacrificed to attain the goals of spending more time on school and studies.

Good Achievement in Reading

Not all tests comparing American students with those of other countries show our students at a disadvantage. In 1992, the International Association for the Evaluation of Educational Achievement compared reading skills of 200,000 students in 31 countries. American nine-year-olds ranked second on this test, and fourteen-year-olds ranked ninth.

Comparing Top Students

Comparing students in the top half of their classes in the U.S. and Japan tends to favor the American students. Robert Everhart, dean of the School of Education at Portland State University, stated in an interview:

The top 50 percent of American students actually outperform the Japanese on international tests of math and science. The bottom 50 percent of Japanese students don't score much worse than the top 50 percent of Japanese students, but the bottom 50 per-

cent of American students is far worse than the top 50.... What we have in our country is wide variance in terms of student ability as indicated on test scores.... In Japan you don't have that kind of variance.

The debate over international comparisons is a lively one, with much to ponder on both sides.

PERCENTAGE OF U.S. STUDENTS ATTENDING COLLEGE

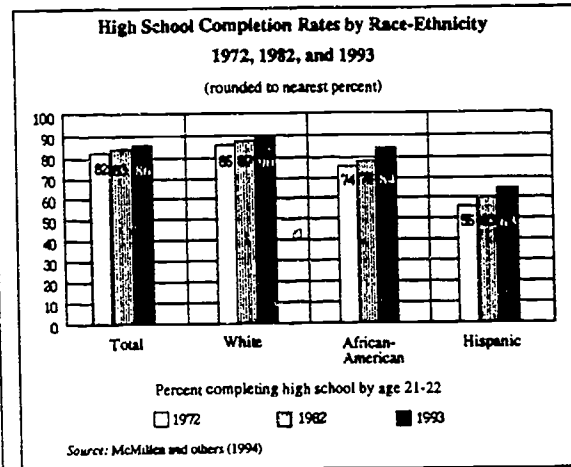
Nearly 60 percent of U.S. high school graduates attempt some form of postsecondary studies, and about 26 percent receive a bachelor's degree. These rates are the highest in the world by far. In most other developed nations, including Japan, France, and England, only 10-15 percent of high school graduates receive university training.

Because large numbers of U.S. students attend college, education in this country can be thought of as a sixteen-year rather than a twelve-year process. Subjects such as calculus are frequently deferred from high school to college in the U.S. This difference between education in the U.S. and other countries makes it difficult to compare the achievement of high school students in those areas of math and science that U.S. students have not studied at the time of testing.

STUDENT HIGH SCHOOL GRADUATION RATES

High school completion rates have increased steadily during the past twenty years. The "event" dropout rate (the proportion of students who drop out in a single year) in grades 10 through 12 was 6.7 percent in 1978 and 4.5 percent in 1993 (McMillen and others). Some students who drop out later return to school and graduate or obtain a GED. When delayed graduations and GED figures are included, 86 percent of American students age 21-22 had completed high school in 1993, compared to 82 percent in 1972.

One of the most significant factors in dropout rates is family income. Among students age 16-24 whose family incomes rank in the bottom fifth, the "status" dropout rate (the proportion who have not completed high school and are not enrolled) in 1993 was 24 percent, compared with 10 percent for



those with incomes in the middle three-fifths, and 3 percent for those in the top fifth.

This strong relationship between income and school completion is true among all racial-ethnic groups. For African-Americans, the rates are 25 percent (low income), 9 percent (middle income), and 4 percent (high income). For Hispanics, they are 41, 24, and 6 percent, respectively.

Schools serving disadvantaged students are striving in a variety of ways to encourage them to stay in school. The effectiveness of these efforts is shown by the fact that, year by year, more students are staying in school.

PREPARATION FOR WORKPLACE SKILLS

Schools are frequently accused of inadequately preparing students for the workplace. Such preparation should be based on knowledge of which skills employers actually want. Two studies of work-force skill requirements show that employers are looking primarily for punctuality, respect for others, following directions, and honesty. The only academic skill that employers seem to want is reading, needed for "following directions" and "reading instructions."

When it comes to providing training for employees, most business training dollars are spent on college-educated employees, in areas such as inservice training of managers, supervisors, and salespeople. "Fewer than 10% of all business training dollars go to blue-collar, entry level workers. Additionally, very little of this small sum is spent on basic skills training" (Carson and others).

These data do not necessarily show that all

high school graduates are prepared to enter the work force. Robinson and Brandon (1992) suggest that one reason employers spend so little on remedial training is that they continue to search, instead, for workers who have the required skills.

A number of high schools nationwide are offering innovative programs, often in conjunction with the business community, to help students develop appropriate workplace skills and make appropriate career choices in high school.

WHOSE PROBLEM IS IT?

A host of factors outside the control of educational systems often dictate what schools are able to do. Harold Hodgkinson states that "in 1993 more than 23% of America's children were living below the poverty line and thus were at risk of failing to fulfill their physical and mental promise" (1993).

Factors over which the educational system has no direct control include poverty, family instability, and health conditions. Everhart estimates that these factors control about 60 percent of a child's performance in school. He said, "Educators need to pay attention to the 40 percent they do control, and the rest of the public and society in general has to pay a lot of attention to the 60 percent that schools don't control."

Richard Jaeger, professor at the University of North Carolina, states: "To credit or blame the schools alone for the achievement of the young is to promote the absurdity that the schools are solely responsible for the education of young people—quite apart from the communities and societal

institutions that support them, regulate them, and adopt their graduates" (1992).

CONCLUSION

Consensus about a topic as broad as education is probably impossible to obtain, but available evidence indicates that schools are doing many things right as they seek to meet the varying needs of a changing population of students.

Bibliography

- Berliner, David C. "Educational Reform in an Era of Disinformation." Paper presented at the annual meeting of the American Association of Colleges for Teacher Education, San Antonio, Texas, February 1992. 97 pages. ED 348 710.
- Carson, C. C.; R. M. Huelskamp; and T. D. Woodall. "Perspectives on Education in America: An Annotated Briefing." *Journal of Educational Research* 86, 5 (May/June 1993): 259-310. EJ 471 787.
- Hodgkinson, Harold. "American Education: The Good, the Bad and the Task." *Phi Delta Kappan* (April 1993): 619-23. EJ 461 096.
- Jaeger, Richard M. "Weak Measurement Serving Presumptive Policy." *Phi Delta Kappan* 74, 2 (October 1992): 118-26, 28. EJ 451 424.
- Kirst, Michael. "Strengths and Weaknesses of American Education." *Phi Delta Kappan* 74, 8 (April 1993): 613-16, 18. EJ 461 095.
- McMillen, Marilyn M.; Phillip Kaufman; and Summer D. Whitener. *Dropout Rates in the United States: 1993*. Washington, DC: National Center for Education Statistics, September 1994.
- Robinson, Glen, and David Brandon. "Perceptions About American Education: Are They Based on Facts?" Arlington, Virginia: Educational Research Service, 1992. 35 pages. ED 349 683.

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Henry cites the fact that in his own field more journalism majors are in college at a given time than are employed in all the daily newspapers in the U.S. The same has been true in the recent past of law, finance, education, and computer science. "Inevitably many students of limited talent spend huge amounts of time and money pursuing some brass-ring occupation," he says, "only to see their dreams denied. As a society we consider it cruel not to give them every chance of success. It may be more cruel to let them go on fooling themselves."

Bracey (1994) confirms some of Henry's theses. "The number of college educated door-to-door salesmen grew from 57,000 in 1983 to 75,000 in 1990, while the number of bus drivers with bachelor's degrees increased from 99,000 to 166,000." Bracey goes on to point out that the people really in trouble in this scenario are the high school graduates, whose customary jobs go to people with degrees, leaving them only part-time, low-paying jobs.

Increase, Not Decrease, May Be Needed

On the other side of this issue, Dave Frohnmeyer, president of the University of Oregon, believes that we should provide a college education for an even larger percentage of young people in the future. Frohnmeyer argues that new technological demands will require a better educated work force. By the year 2000, he says, "Two out of three jobs available (in Oregon) will require at least a college degree.... Our mission comes down to this: We don't simply want to train people to serve the new economy—we want to teach people how to create it" (1994). Frohnmeyer believes that "such change points to a new kind and quality of education, a *university* education a person must have to fully cope with that changing world." If he is right, the United States is more fully equipped than any other country to offer that level of education to almost its entire population.

Henry's and Frohnmeyer's proposals must be judged according to the reader's values. Given the choice between educating a large segment of the population to some degree or an elite to a higher degree (if that is in fact the actual choice), society will have to determine which it deems most important.

Number of Students Graduating from High School

Although widespread concern exists over the number of students who drop out of high school, when GED figures and delayed graduations are included, almost 86 percent of students graduate from high school. Graduation rates are lower for blacks and Hispanics than for whites, and family income has a significant correlation with graduation rates.

Types of Dropout Rates

One of the objectives of the Goals 2000: Educate America Act, passed by Congress and signed into law by President Clinton, is a high school graduation rate of at least 90 percent. Many people are unaware that the United States has nearly achieved that 90 percent goal. The high school completion rate for 21-22 year olds who received either a diploma or GED was 86 percent in 1993, according to the National Center for Education Statistics (Marilyn McMillen and others 1994).

These figures are different from what Carson and his colleagues at the Sandia laboratories refer to as the "on time" graduation rate, which looks only at actual diplomas issued each year. This on-time rate, according to the Sandia report, "has been steady for 20 years at roughly 70 to 80 percent" (1993). But many students who do not graduate "on time" return to high school after an absence and graduate late or earn a GED.

Just as graduation rates are viewed in more than one way, dropout rates are also analyzed from different perspectives. The National Center for Education Statistics distinguishes three different dropout rates as follows:

- *Event rates* measure the proportion of students who drop out in a single year without completing high school. Event rates are

important because they reveal how many students are leaving high school each year and how each year's rates compare with previous years' rates.

- *Status rates* measure the proportion of the population who have not completed high school and are not enrolled at one point in time, regardless of when they dropped out. Status dropout rates are important because they reveal the extent of the dropout problem in the population. . . .
- *Cohort rates* measure what happens to a single group (or cohort) of students over a period of time. Cohort rates are important because they reveal how many students in a single age group (or in a specific grade in school) drop out over time.

No matter which of these measures one considers, dropout rates have declined in the past 15 years. The event dropout rate for persons 15 through 24 in grades 10 through 12 was 6.7 percent in 1978, and 4.5 percent in 1993. Furthermore, the status dropout rate of persons sixteen through 24 years old was 14.2 percent in 1978 and 11.0 percent in 1993. (McMillen and others 1994)

Analyses of Dropout Rates

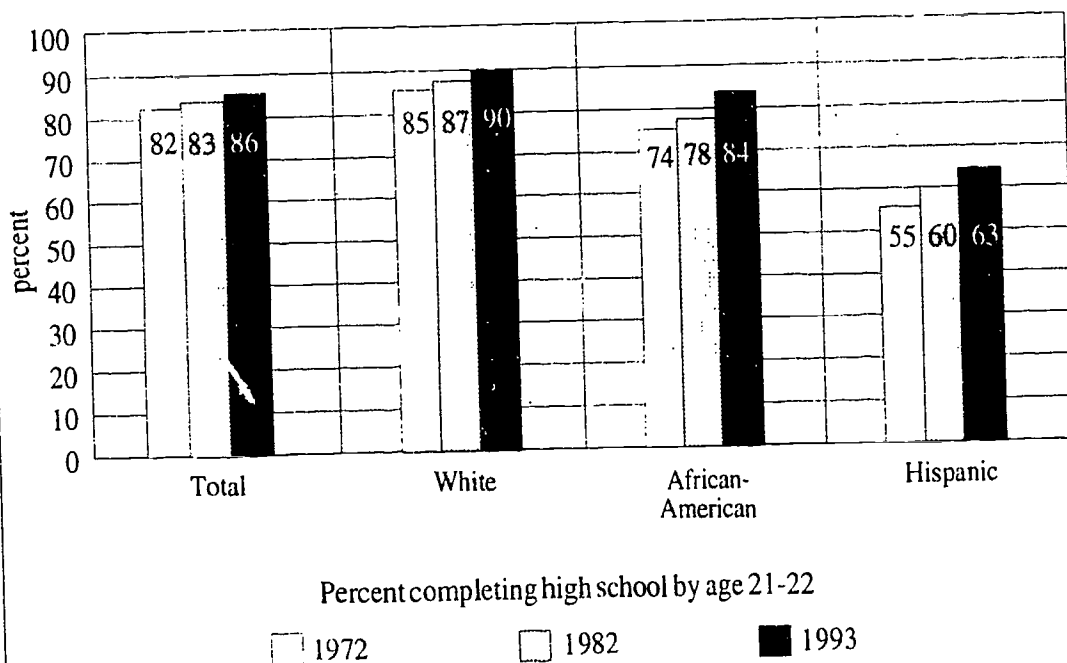
When viewing these figures demographically, we find that dropout rates are similar for males and females, regardless of race. Statistics analyzed according to race-ethnicity reveal that African-Americans and Hispanics drop out at a higher rate than whites (see figure 5). In 1972, graduation rates for persons aged 21-22 were 85 percent for whites, 74 percent for African-Americans, and 55 percent for Hispanics. By 1993, these figures had improved to 90, 84, and 63 percent, respectively. The rate for whites showed the least improvement—an increase of 4 percent, compared to about 9 percent for each of the other two groups.

Language difficulties may be a major factor in the dropout rate of Hispanics. In 1992, the status dropout rate for Hispanics who speak only Spanish was 83 percent, compared to 17 percent for Hispanics who report speaking English well.

As figure 6 demonstrates, one of the most significant factors in dropout rates is family income. Among students age 16-24 whose family incomes rank in the bottom fifth, the "status" dropout rate (the proportion who have not completed high school and are not enrolled) in 1993 was 24 percent, compared with 10 percent for those with incomes in the middle three-fifths, and 3 percent for those in the top fifth.

A further breakdown of these income-related figures by race-ethnicity shows that "there were no significant differences in status dropout rates of white and black 16-24-year-olds. The rates for Hispanic 16-24-year-olds

Figure 5
High School Completion Rates by Race-Ethnicity
1972, 1982, and 1993
 (rounded to nearest percent)



Source: McMillen and others (1994) (Created from data in table C5, page 151)

were, however, higher than for whites and blacks within the low and middle income levels" (McMillen and others 1994).

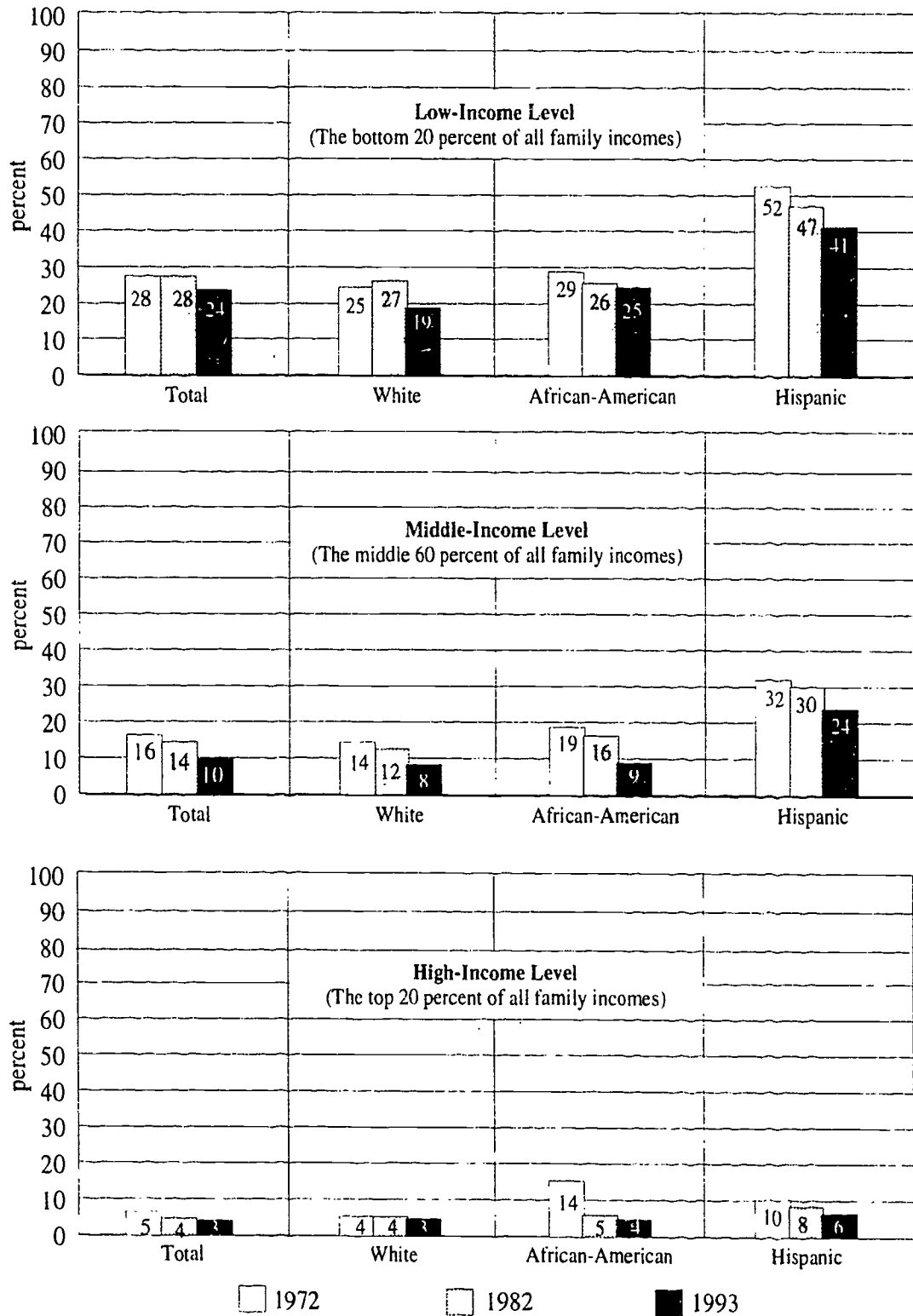
Other analyses by the NCES show that more students dropped out in the South (42 percent of all dropouts) and West (24 percent) than in the Northeast (14 percent) or Midwest (20 percent).

The most significant dropout problems are among disadvantaged urban and rural students. The status dropout rate is 13 percent for central-city students, 11 percent for rural students, and 9 percent for suburban students.

Schools serving these students are striving in a variety of ways to encourage them to stay in school. Programs such as Head Start and the acclaimed Perry Preschool program of the 1960s have proved effective in getting at-risk children off to the right start. The "I Have a Dream" program offers a free college education to students from disadvantaged urban areas who remain in and graduate from school. The Dayton, Ohio, public schools have developed a comprehensive program to deal with the needs of at-risk middle-school students. The effectiveness of these and similar efforts is shown by the fact that, year by year, more students are staying in school.

Figure 6
Status Dropout Rate, Ages 16-24, by Income and Race-Ethnicity
1972, 1982, and 1993

(rounded to nearest percent)



Source: McMillen and others (1994) (Created from data in table A46, pages 110-112)

Preparation for Workplace Skills

Preparation of students for the workplace should be based on knowledge of which skills employers actually want their workers to have. Programs are being developed at a number of sites in a variety of ways to assist students in developing marketable, career-oriented, and usable skills.

Common Concerns

Schools are frequently accused of inadequately preparing students for the workplace. James Baker, CEO of Arvin Industries, is quoted in *Fortune* magazine: "In the workplace of the future, all employees on the factory floor are going to have to be highly literate and computer friendly." The author of the article then states, "Right now, too many are neither" (Perry 1992). Worker illiteracy is a commonly held myth about education that needs careful examination.

Rumors abound that companies must train their employees in reading, basic math, and composition after they are hired because schools have failed in this fundamental task. Even where students graduate with basic skills, many people believe that graduates are unprepared for today's technological business world.

The first question to ask is, "What skills do employers actually want their workers to have?"

Work-Force Skill Requirements

Huelskamp (1993) reports that "very few companies offer training that is intended to compensate for inadequate academic preparation of new

employees. Rather, the training focuses on such social skills as punctuality and personal appearance.” This conclusion is born out by two studies of work-force skill requirements, one conducted by the Michigan Education Department and the other by the Rochester New York School District, reported in the Sandia report and by David Berliner (1992).

As table 2 shows, employers are looking primarily for social skills like punctuality, respect for others, following directions, and honesty. The only academic skill that ties to these qualities is reading, needed for “following directions” and “reading instructions.” Even computer skills and computer programming rank on the “least important” list.

Table 2
Surveys of Skill Requirements

Five Most Important Skills for Employment

<i>Michigan Survey</i>	<i>Rochester, NY Survey</i>
No Substance Abuse	No Substance Abuse
Honest, Integrity	Follow Directions
Follow Directions	Read Instructions
Respect Others	Follow Safety Rules
Punctuality, Attendance	Respect Others

Five Least Important Skills for Employment

<i>Michigan Survey</i>	<i>Rochester, NY Survey</i>
Mathematics	Natural Sciences
Social Sciences	Calculus
Natural Sciences	Computers
Computer Programming	Art
Foreign Languages	Foreign Languages

Source: Carson and others (1993)

How Businesses Actually Spend Training Dollars

The assertion that employers have to spend thousands of dollars annually on remedial reading and other basic skills keeps getting repeated. But it belongs on the same level as the story about the woman with the ants’ nest in her hair, or the one about little green men found near a crashed UFO. Everyone seems to know someone with firsthand experience of these mythical events, but no evidence exists that they really happened.

A report by the Commission on Skills of the American Workforce, cited by Carson and his colleagues (1993), shows that most business training dollars are spent on college-educated employees, in areas such as inservice training of managers, supervisors, and salespeople. “Fewer than 10% of all business training dollars go to blue-collar, entry level workers. Additionally, very little of this small sum is spent on basic skills training” (Carson and others 1993).

These data do not necessarily show that all high school graduates are prepared to enter the work force. Robinson and Brandon (1992) suggest that one reason employers spend so little on remedial training is that they continue to search, instead, for workers who have the required skills.

On the international scene, studies show that "Japan and Germany, our major economic competitors, far outspend the U.S. in workplace training, in spite of the fact that many view the education systems in these countries as superior to our own" (Huelskamp 1993). The conclusion is that even a well-educated employee may need additional training to perform specialized tasks required by his or her employer. The fact that businesses spend substantial dollars on training doesn't reflect negatively on the quality of education their employees received.

Preparation of Workers for the Workplace

Statistics show that 60 percent of high school graduates go on to some kind of postsecondary education, which means that around 40 percent try to enter the work force directly from high school. How well are their schools preparing these students for the skills they will need?

In Oregon, one provision of the Educational Reform Act for the 21st Century, passed in 1991, is the Tech Prep/Associate Degree Program, which seeks to integrate what students learn in school with their future roles as workers. Dale Parnell, commissioner of community colleges for the state and former state superintendent of public instruction, states that the Tech Prep/Associate Degree program will achieve the following goals:

- Combine knowing with doing

- Help students develop the lifelong learning competencies and flexibility they will need in the future, while providing employers with the kind of workers they need for high-performance workplaces

- Provide curricular continuity between high schools and community colleges with an applied academic curricula

Parnell concludes that "a difference can be made when we connect academic and technical education in new ways" (1992).

A number of high schools nationwide are offering innovative programs, often in conjunction with the business community, to help students develop appropriate workplace skills and make career choices in high school that will lead to profitable and personally satisfying careers. Among these are six schools receiving grants from Jobs for the Future, a nonprofit corporation that offered grants of \$100,000 to six school districts nationwide. North Clackamas School District in Milwaukie, Oregon, is one of these; other districts are in Boston; Philadelphia; Milwaukee, Wisconsin; Louisville,

Kentucky; and a location yet to be named in Michigan. These “benchmark districts” are expected to develop programs for all students as well as to prepare skilled workers for business.

North Clackamas Superintendent Ben Shellenberg said his district was selected for the grant because of programs already in place. North Clackamas has 400 business partners, with plans to increase those numbers. This fall, all ninth graders will spend a day or two “shadowing” someone at a business. Sophomores and seniors have the option of a work experience internship. Seniors can enter an apprenticeship program.

“One deficit of U.S. public education,” Shellenberg said, “is the tension between allowing kids to explore and experience a lot of things, and still, when they finish, having a product they can latch on to, a degree from a community college or university, or a job.” His goal is to give kids a “good solid base of experience so they have the skills, knowledge, and ability to use those skills when they finish here.” The program at North Clackamas will be discussed more fully in chapter 8.

Whose Problem Is It?

The most serious problems that confront schools arise from students who live in poverty, come from dysfunctional families, live in neighborhoods filled with crime and violence, and lack rudimentary health care. Schools can't be expected to single-handedly deal with all these societal problems.

Factors Affecting Student Performance

In one of the poorest, ugliest, most grindingly depressing neighborhoods of urban Chicago, North Lawndale, at Mary McLeod Bethune School, a teacher named Corla Hawkins represents the best in American education. Her fifth-grade classroom is filled with books, games, science projects, plants, art collections, and a rocking chair. Her students are involved in a variety of absorbing educational activities. She spends much of her free time with them, taking them for walks during her break times, and on Saturday going to places that they would never visit otherwise, like the art museum.

Writing about this remarkable teacher, Kozol (1990) says, "What is unique in Mrs. Hawkins' classroom is not what she does, but who she is. Warmth and humor and contagious energy cannot be replicated." As much as we would like to point to Corla Hawkins and say, "See. Everything's all right with American education. Look at this wonderful teacher," Kozol maintains that what she represents is not enough. One outstanding teacher, an island of hope in a sea of despair, cannot counteract what goes on in the rest of the classrooms at Bethune School and the rest of the schools in North Lawndale. No educational system by itself can effectively deal with the poverty, instability, and hunger of an entire community.

A number of prominent researchers point out that factors outside the control of educational systems often dictate what schools are able to do. Harold Hodgkinson, director of the Center for Demographic Policy, Institute

for Educational Leadership, Washington D.C., states: "In 1993 more than 23 percent of America's children were living below the poverty line and thus were at risk of failing to fulfill their physical and mental promise. This is one of the highest youth poverty rates in the developed world" (Hodgkinson 1993).

Hodgkinson points out that parents' level of education is one of the best predictors of students' educational achievement. Other factors affecting student learning are

problems they brought to the kindergarten door, particularly poverty, physical and emotional handicaps, lack of health care, difficult family conditions, and violent neighborhoods. Using indicators of these conditions, it is very easy to predict in the early grades which children will be at risk of school failure. (1993)

Hodgkinson proposes to attack these problems using a "seamless web" of services, including education but also bringing in social welfare, health care, and housing. It seems clear that problems of such magnitude require the coordinated attention of every facet of society to solve and cannot be laid wholesale at the schoolhouse door.

Another factor directly affecting what the educational system is able to accomplish is the growing number of students for whom English is not a

SCHOOLS CAN'T SOLVE SOCIAL PROBLEMS ALONE, SAYS NORMA PAULUS

Oregon State Superintendent of Instruction Norma Paulus comments on the public's expectation that schools can solve society's deepest problems: "We have to recognize that schools can no longer be the priest, the counselor, the surrogate mother. As society changed and the traditional family changed, society is bludgeoned with drugs and violence, and schools bore the brunt of that. People are just now beginning to understand how that's ground the system down, how it's watered down the curriculum, how it's increased the cost of school funding."

While acknowledging that many people want schools to be like they were in the past, Paulus believes that's no longer possible. "When those people were in school, they didn't have somebody standing at the schoolhouse door to make sure the wrong person didn't pick up a child. You didn't have a team that was ready on Sunday night to wipe out all the graffiti before Monday morning. You didn't have parents coming to

school with shotguns to shoot teachers. You didn't have children bringing guns to school. That's not the teacher's fault. It goes right back to the community."

Paulus believes that all facets of social service should cooperate to deal with dysfunctional families in a preventive rather than crisis-intervention manner. "We have got to find ways, instead of taking kids out of the homes, to go into the homes early enough with resources to try to hold these families together and build them up."

What's really right with our schools? Paulus believes the major factor is the dedication of people inside the school system who believe it's still possible to have a free public education. And, she concludes, "the system of free public education in this country is the very soul of the democratic process."

*Source: Personal Interview,
September 20, 1994*

native language. The Sandia report found that "as many as 5 million children of immigrants will be entering the K-12 education system in the 1990s. More than 150 languages are represented in schools nationwide, and figures nearing this number occur in single large districts." Dealing with students for whom English is not a native language is one more challenge for beleaguered and underfunded systems of education.

Importance of Parent Involvement

Interesting data about the importance of parents in the educational process emerge from a number of studies. Parent involvement was a major aspect of the successful Perry Preschool program in the sixties. Studies of preschools in general show that those requiring some level of parent involvement appear to produce more lasting academic and social growth than those that "go it alone."

David Weikart (1989), listing criteria for a quality preschool program, includes "active involvement of parents in developing and operating the program, and in parent training activities." He comments, "When early education projects have succeeded with children under the age of three, it has typically been through the parents."

In the same report, Weikart cites a study by Nathan Caplan of the University of Michigan that documents the educational success of Vietnamese boat people, calling it an "amazing story of success in education." Despite the fact that the Vietnamese in the study "had all the handicaps usually cited as the reasons why other minority children have done poorly: a different culture, a different language, attendance at poor schools, parents on welfare or in low-wage jobs, and little or no contact between home and schools," 79 percent of the Vietnamese students were receiving grades of A or B.

Caplan found, however, that the Vietnamese families were committed to a work ethic and that they believed that individuals should be willing to try new things and should assume full responsibility for their own behavior and obligations. In short, they held their children responsible for performance. (Weikart 1985)

Perry (1992), writing in *Fortune*, says, "Several recent studies tracked young people who had successfully overcome great odds. The one thing they all had in common: a one-to-one connection with a caring adult." Perry comments that "the reality of late 20th century American family life is that many children grow up in single-parent households, homes where both parents work, and all too often in homes ravaged by drinking or drugs." Schools can no longer depend on the presence of a "caring adult" in the lives of their students.

Jim Fox, a retired journalist, former school board member, and substitute teacher, makes the point that the responsibility for how much a child learns in school lies in part with the parents. He insists it would be logical for "parents to take a hand in the education of their children—to insist that homework is done, that teachers are respected and obeyed, that daily attendance is standard operating procedure—and to accept some of the blame if all does not go well for their offspring" (1993). Fox feels that the public, in blaming schools for some children's failure, is beating "the wrong whipping boy."

Lamar Alexander, former secretary of education, says much the same thing: "You cannot talk about achieving 90 percent graduation rates without talking about parents who check on homework and turn off the television and know where their kids are" (in Perry 1992).

Robert Everhart, dean of education at Portland State University, would like to insist on parent involvement:

I think we need to spend more time working more closely with communities and parent groups and getting them into the schools. I personally think that every parent who sends their child to a school ought to be responsible for providing some of their time to that school in terms of volunteer work. (Everhart 1994)

However, changes in family structure make it unlikely that Everhart's worthy goal is achievable on a national basis. Michael Kirst of Stanford University writes:

Traditionally, most institutions that serve children and youths make the implicit assumption that children live with two biological parents, one working in the home and the other working in the formal labor market. This traditional family type now accounts for less than one-third of all families. Forty-six percent of children live in homes in which both parents (or the only parent) work outside the home. Because of an increase in divorce and in the number of births to single mothers, about 60 percent of all children and youths will live in a single-parent family for some period of their lives. (1993)

Kirst concludes, "All of this does not mean that local school authorities are helpless. Rather, it means that they cannot control their agendas or shape outcomes as much as they could in the past."

Schools Must Do Their Best with What They Do Control

Any kind of realistic look at schools and students must take into account these factors over which the educational system has no direct control, including poverty, family instability, and health conditions. Robert

Everhart estimates that these factors control about 60 percent of a child's performance in school:

If 60 percent of a child's achievement is accounted for by family income and stability, that means that education has control over about 40 percent of that achievement, and I believe that we've got to pay attention to both the 60 percent and the 40 percent.... People who are upset with schools think that schools control or should control 100 percent of kids' performance in schools.... Educators need to pay a lot of attention to the 40 percent they do control, and the rest of the public and society in general has to pay a lot of attention to the 60 percent that schools don't control

Richard Jaeger, educational research professor at the University of North Carolina, sums up the situation this way:

To credit or blame the schools alone for the achievement of the young is to promote the absurdity that the schools are solely responsible for the education of young people—quite apart from the communities and societal institutions that support them, regulate them, and adopt their graduates. (1992)

What's Right with Schools? Some Examples

In spite of all the handicaps that make it hard to effectively educate our young people, many outstanding schools and programs exemplify the continuing efforts of educators to meet student needs.

Early Intervention for At-Risk Students

The importance of a right start in school can hardly be overemphasized, but it becomes even more crucial when dealing with children of poverty. Studies show that early childhood programs can have positive effects that last into adulthood. The most thoroughly researched preschool program is probably the Perry Preschool program of the sixties.

Designed both as a research project and an exemplary program, the Perry project divided groups of African-American three-year-olds born into poverty in Ypsilanti, Michigan, into evenly matched research and control groups. The research group attended preschool for two-and-a-half hours per day for two years, and students and their mothers received weekly ninety-minute home visits.

The Perry curriculum was organized around the concept of "active learning" and encouraged the development of problem-solving skills and self-confidence in a "materials rich" environment in which children initiated and planned activities. It deliberately avoided two other models, the free-play concept and the academic-preparation curriculum.

Both research and control groups in the Perry program were followed with periodic evaluations for over twenty years. As reported in *Education Week*, at age twenty-seven there were some remarkable differences between the two groups:

- Thirty-five percent of the control group had been arrested five or more times at age 27—and 25 percent at least once for drug dealing—compared with 7 percent of the program group in both categories.
- Twenty-nine percent of the program group, compared with 7 percent of the control group, were earning at least \$2,000 a month.
- Thirty-six percent of the program group owned their own homes, compared with 13 percent of the control group.
- Eighty percent of the adults with no preschool had received social services some time during the past 10 years, compared with 59 percent of those in the preschool program.
- The same percentage of males who did and did not attend preschool were married, but those in the program were married longer. Among females, 40 percent of the program group were married, compared with 8 percent of the control group.
- Out-of-wedlock births were high for both groups, but less frequent among program females: 83 percent of the births to the control group were out of wedlock, compared with 57 percent of the program group. (Cohen 1993)

The conclusion drawn by the researchers who conducted this long-term study is that the program helped develop positive social attitudes leading to adult success. David P. Weikart, coauthor of the study, told Cohen in the *Education Week* article that the study “validates the idea that you can change the trajectory of kids’ lives.”

Researchers caution that not every preschool program can be expected to achieve these results. They believe that the elements of the Perry Pre-school program that ensured its success—active learning, training of teachers, and parent outreach—must be part of any successful program. Still, these statistics offer hope that education can reach out and make a lasting difference in the lives of students.

Programs have also been designed to help at-risk students once they enter the school system. A controversial first-grade class in Baltimore was reported in *Life* magazine (Hirshberg 1991). In the almost entirely African-American Coleman Elementary School, principal Addie Johnson was worried about the lack of male role models for her young students. Most were being raised by mothers or grandmothers, and in their early school years taught by women. Johnson decided to try grouping first-grade boys together in an all-male class taught by a “strong male leader with a loving heart.” She selected thirty-year-old Carter Bayton for this assignment, and told him, “You have to educate *all* these kids. The ones you can’t teach may wind up shooting the ones you can.”

Bayton took the challenge and promised Johnson he would have 80

percent of the boys reading at second-grade level by June. On the first day, he gently but firmly laid down the law. The boys would always sit "in the proper manner" (cross-legged, in a semicircle) and never speak without permission. To get permission, they must raise their hands. He also told them to speak in soft voices.

Bayton used praise and fatherly hugs to reward his students. And his methods worked. The boys, some of whom had seemed unteachable in kindergarten, learned to read, write, and work together in teams. Near the end of the school year, Bayton took the whole class into the principal's office, where they proceeded to read to her, taking turns, the story of Rumpelstiltskin.

Providing a Sense of Focus

Other elementary programs have sought to give at-risk students a goal to work toward. The "I Have a Dream" program originated in East Harlem in 1981 when New York businessman Eugene Lang offered to guarantee to a class of sixth graders that each student who stayed in school and graduated from high school would have his college education paid for. The dropout rate for that community at that time was six out of ten students. Forty-five of the sixty-one students in that sixth-grade class stayed in school, and thirty-two went to college.

A similar program in the Portland, Oregon, schools is funded by the Oregon "I Have a Dream" foundation. The Oregon program presently guarantees to over 300 students, in schools with large numbers of low-income, single-parent households, that those who finish high school will have their college paid for.

The idea of giving students the educational goal of college is approached in another way by the "College and Me" program in Garrett County, Maryland. Linda M. Strider, program coordinator, reports that the Garrett County community is rural and isolated. "Like most of Appalachia, Garrett County has lagged behind the rest of the nation on various socioeconomic indicators, particularly those pertaining to educational attainment, such as percentage of graduates attending college and percentage of students graduating from college" (1994).

The program "College and Me" was developed as "an early intervention program to foster a positive attitude toward college in middle-grade students and their parents" (Strider 1994). The ultimate objective is to increase the number of high school graduates who attend college.

Each fifth-grade class in Garrett County spends a week on the campus of Garrett Community College. There, students receive regular classroom instruction from their own teacher, and in addition participate in a variety of

enrichment programs offered by the college's faculty. These activities can range from conducting a simulated archaeological dig, to engineering a bridge, to studying a model river to learn about currents, eddies, and river safety. In addition, fifth graders interact with college students, have access to the college library and gym, and at the end of their special week receive a commemorative sweatshirt. Parents are invited to attend college with their children on Thursday of each class's week on campus.

When the initial group of fifth graders reached eighth grade, they visited Frostburg State University just prior to deciding on their high school programs.

The program has not been in existence long enough to judge its ultimate effect on students' college enrollment, but Strider reports: "Early indicators suggest that the program will succeed: the coordinators have observed and documented increased self-esteem and motivation to pursue a college education."

Providing a Safe, Caring Environment

Almost daily we hear about violent incidents in our schools, about kids who bring guns, knives, and drugs onto school campuses. We also hear that students appear to be most at risk of not completing high school in urban pockets of poverty and isolated rural communities. However, at least one rural and one urban high school are seeking to reverse those trends by providing caring environments and encouragement toward academic excellence.

Mitchell High School

The rural community of Mitchell, Oregon, population about two hundred, is capitalizing on its strengths to attract urban students and students who have had negative school experiences. Like many Central Oregon communities hit hard by a decline in the timber industry, Mitchell found its population dwindling, and with that decrease came a potentially disastrous drop in the school population.

Superintendent-Principal Michael Carroll and his school board took a hard look at the school's strengths, which included its rural setting, teacher-student ratio of one to ten, better-than-average test scores, one computer for every seven students, a photography lab, and an award-winning welding program. To attract more students and keep the school open, the board authorized Carroll to purchase three single-wide mobile homes for use as dormitories, and in 1992 Mitchell let it be known that it was accepting boarding students.

As of September 1994, Mitchell had fifteen boarding students and was

PUBLIC SCHOOLS RANKED HIGHEST

A survey conducted by *Money* magazine (Topolnicki 1994) revealed some surprising data about public schools. *Money* compared seventy private and public schools, focusing on the areas of student achievement, teachers' qualifications, course offerings, class size, facilities, discipline problems, and ethnic diversity.

The magazine was "shocked" to discover that those public schools that serve advantaged areas (average household incomes ranging from \$44,208 to \$118,456) are comparable academically to the nation's top private prep schools. Among *Money's* conclusions:

- Students who attend the best public schools outperform most private school students.
- The average public school teacher has stronger academic qualifications than the average private school teacher.
- The best public schools offer a more challenging curriculum than most private schools.

- Public school class sizes are no larger than in most private schools and are smaller than in most Catholic schools.

Money asked William L. Bainbridge, chief executive of SchoolMatch, a Westerville, Ohio, company that helps parents select the right schools for their children and that identified the schools used in *Money's* survey, just how common are the "best" public schools. His answer: "About 10% of all public schools—or about 2,000 nationwide—are as outstanding academically as the nation's 1,500 most prestigious and selective private schools."

The bottom line is that, when given adequate financial resources and students who are motivated to learn, public schools outperform most private schools. *Money's* advice to parents wondering where to send their kids: "We believe you get the best value for your education dollars at a top public school."

preparing to move them into a newly constructed dormitory with a capacity for twenty. Because of local enrollment, and the desire to maintain the advantages offered by small classes, Superintendent Carroll has started a waiting list rather than grow to capacity. Included on the waiting list are potential enrollees from as far away as Illinois.

Carroll sees class size as the greatest strength of Mitchell's program. "More individual attention is paid here to each student, and the atmosphere is more academic." In the larger schools from which most boarders come, students may get in with a crowd who think it isn't cool to study. That doesn't happen at Mitchell.

The school has five teachers offering standard high school subjects. Students also can take classes over satellite TV. Presently several are enrolled in Spanish II and German I.

The school has experienced some turnover of its boarding students. Some have left due to homesickness. Over the three years of the program, Mitchell has sent away seven or eight students, all for using drugs or alcohol, automatic grounds for expulsion from the dorms. The rest have stayed, apparently thriving in the family-like small town atmosphere.

Mitchell charges a \$75 monthly fee to its dormitory students, mainly for the cost of their hot lunches. Most of their other expenses are covered by the \$4,200 per student per year the district receives from the state.

Benjamin Banneker High School

Just as Mitchell capitalizes on its strengths as a rural school, Benjamin Banneker High School in Washington, D.C., is a model of the potential for excellence that can be realized in an urban setting. Students at Banneker take full advantage of the opportunities provided by their unique location in the nation's capital, even though the school itself is not in the most desirable part of the city.

Banneker is Washington's only academic magnet high school, and students must formally apply and be accepted in order to enroll. Applications are received from junior high school students throughout the city. The school population is only 400, and Banneker maintains a waiting list. Criteria for admission are simply the ability to read and compute about at grade level.

One reason the school is so attractive to potential enrollees is Banneker's impressive college acceptance rate. One hundred percent of the school's graduates are accepted into four-year colleges each year. Another reason is the caring atmosphere of the school, despite its location in a tough neighborhood. One of the first things students mention when asked about their school is that it is a safe place.

One strength of Banneker's program is its support system. New students are assigned an older student as a mentor before school starts. Mentors and their students often connect during the summer prior to the student's entry in the school. Banneker also offers support in the form of a five-week summer institute that includes enrichment courses in language arts, foreign language, math, and science. Three-fourths of the students in the summer institute are incoming ninth graders.

Parents are fully involved in their children's education at Banneker and assist in a variety of volunteer programs. The school has a partnership with Howard University, and Banneker's students visit that campus to use the university library, take advanced-placement courses, and even use the gym and pool.

Enrichment is provided during the school year through a variety of programs, some connected with the National Science Foundation. Students use the considerable resources of the city in which they live to visit museums and art galleries, and they are linked by computer with the Martin Luther King Library.

Banneker encourages the development of responsible citizens as well as academic achievers. All students must complete 270 hours of community service as a graduation requirement. They fulfill this requirement in a variety of ways, working at hospitals, schools, museums, courts, and charitable institutions.

The academic program is rigorous. All students must take Latin. There are no study halls, and homework takes an average of three hours each

evening. Classes, however, are far from traditional and stress small-group discussions and student involvement. The school's record speaks for the quality of its educational program.

Preparing for the Workplace

Increasingly, schools are becoming sensitive to their responsibilities to prepare non-college-bound students for careers. North Clackamas School District in Milwaukie, Oregon, as mentioned in chapter 6, has received a grant from the Schools of the Future foundation to help with its tech prep programs. North Clackamas has developed a comprehensive "two plus two" program, coordinating the last two years of high school with two years at one of the area's community colleges. Students can select from 118 career fields, including painting, plumbing, sheet metal, radio-television, tilesetting, graphic design, office administration, computer systems, and a variety of health and human resources careers.

As figure 7 shows, the design is flexible, allowing for changing tracks as students broaden their interests or develop new goals.

North Clackamas recognizes that a number of graduates will enter the work force directly from high school. Ben Shellenberg, district superintendent, offers a comprehensive program at the district's Skill Center to prepare students for a variety of careers. "We find," he said,

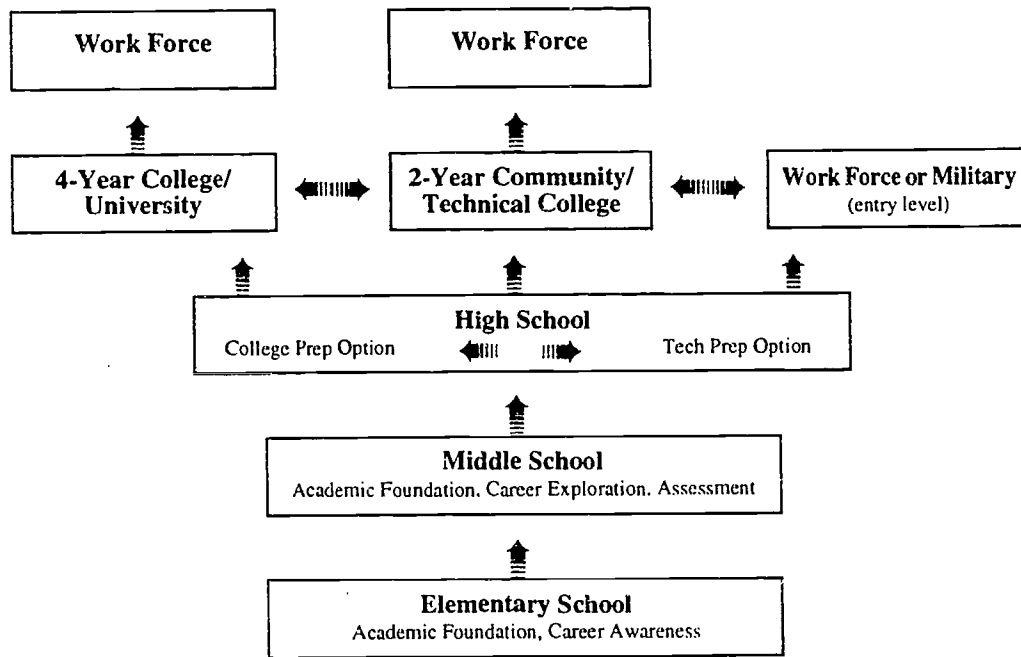
that if you have kids with good skills, they're very marketable, particularly in the graphics cluster. In that area the industry set national standards and funded our two teachers at the skills center for two summers to develop that curriculum. We are one of five or six schools nationally that have certified staff and a certified program. We have kids who have graduated from the skills center program and gone into the printing business and earn up to \$30,000 a year.

Similar successes have been reported in the metal fabrication, health occupations, advanced information systems, and CAD drafting programs.

The Skills Center isn't just for students preparing for technical careers. College-bound students hone their computer and office-management skills at the center. Shellenberg tells of one student with a scholarship to Stanford University who said he had looked at Stanford's required curriculum for attorneys and found that nowhere did it talk about how to manage an office. At the skills center, this young man took the office-management course, learning how to network, computerize, and operate an office so that he could be an effective attorney and run his own office.

North Clackamas students use their skills to start their own businesses, even while in high school, especially in the areas of printing and graphics,

Figure 7
Educational Pathways—North Clackamas School District



Source: Milwaukie High School and others (1993)

where they can set up equipment in the family garage and hire fellow students as employees.

Integrated or Full-Service Schools

The concept of “full service schools” is being tried in California, Florida, Kentucky, Mississippi, New Jersey, and Oregon. These schools provide complete attention to the needs of students, linking education, medical needs, and social- and human-service needs, all centered in a single location, the school.

In Oregon, thirty-six pilot sites throughout the state are receiving assistance in planning, and startup funding in some cases, from the state’s Department of Human Resources. Judy Miller, assistant superintendent for student services of the Oregon Department of Education, points out that each of the thirty-six sites is unique and tailored to the needs of the individual community. Miller said:

We’ve tried to foster a kind of grassroots approach, feeling that if

people at the local level got together and made a commitment, things are more likely to happen.... We have little communities where everyone knows everybody, and it sometimes is easier to coordinate things in a small community.

Glendale-Azalea

One small community providing integrated services at the school site is Glendale-Azalea in the southern part of the state. Glendale-Azalea is a timber-dependent community, suffering now that their mill is closed and timber cutting curtailed. Unemployment has been a serious problem in the community.

The lumber mill donated to the town a facility near the school, including the former home of the mill manager and other buildings. Glendale-Azalea community members have remodeled one of these buildings with a small amount of grant money from a number of sources. Student workers received pay for their work, as they remodeled the house under the direction of a teacher who taught them construction skills. The house was redesigned as a child-care center for families in the community. The child-care program is connected to the high school curriculum, and students in human-development classes work under adult supervision in the child-care center, which is the only such facility in the community.

The integrated-services facility at Glendale-Azalea also provides skill-training opportunities for students and adults in the community, in partnership with Umpqua Community College. Department of Employment staff from the county offices are available on a regular basis at the facility so that people looking for work can meet with the employment division at a convenient location. Judy Miller visited the facility just before its formal opening and commented that "the community is very proud. It's one of those towns where the school really is the center of the community, and the health of the school and the health of the community are tightly linked."

David Douglas

A similar program is in place in David Douglas School District in southeast Portland. Social-service agencies and the school district in this suburban community wanted to connect more closely with the families they were serving, which included a number of high-risk children. David Douglas, assisted by the Oregon Department of Human Resources, funded a position for a family advocate, a uniformed officer from the Multnomah County Sheriff's Department who makes home visits to families with children having difficulty with the law, attendance, or school. This person connects people to the health, employment, welfare, or counseling resources they need

and follows up to make sure people are accessing those resources.

The program at David Douglas also involves a child-care center, responsive to the needs of both teen parents and working families in the community. Subsidies are available for low-income families, and child care is free for teen parents who attend the high school. The child-care program is connected to the curriculum and offers human-development classes for students interested in that field. The child-care center offers a lab opportunity for students in those classes, who receive credit for working under supervision at the center.

Other social services available at the school include consultation with staff from children's services, adult and family services, mental health, and alcohol and drug counseling. The county health department provides onsite immunization for students.

Brief Glimpses of Exemplary Programs

The foregoing examples are a very small tip of a very large iceberg. Throughout this large and diverse country, educators everywhere are moving to improve the ways they meet children's needs at school. Schools have expanded their responsibilities to include before- and after-school services. In many cases, schools have become community centers.

A few more brief examples:

The concept of "charter schools" is being tried in a number of states, including Minnesota and California. Charter schools are granted permission from their community and state boards of education to experiment with non-traditional concepts. Not all are experimental. Some charter schools seek to attract home-schooled students by providing a thoroughly traditional education; others innovate in a wide variety of ways.

The Boston Plan for Excellence in the Public Schools is a community effort involving educators, parents, students, and business leaders in a common effort to improve education from kindergarten through high school. Primary students are encouraged to develop enthusiasm for learning through a plan called Support for Early Educational Development (SEED). Education for intermediate students is assisted by the Hancock Endowment for Academics, Recreation and Teaching (HEART), which offers grants for innovative classroom projects. At the high school level, two programs, Project Action and the Access Program, encourage students to apply for grants and obtain college scholarships.

A small rural school district in Kansas, Canton Galva, links high school and elementary students in a program designed to keep elementary at-risk students in school. The Home School Specialist is an outreach educator who works with students in both home and school settings to encourage self-

confidence and keep the students attending school. The Student Connection program uses high school students as volunteers to assist the Home School Specialist working with these elementary students. The high school students also serve as role models, mentors, and friends, and in the process they themselves grow in self-esteem.

At Jones Metropolitan High School of Business and Commerce in Chicago, a tech-prep program in financial services is designed to integrate vocational, critical thinking, and academic skills, combined with paid summer internships. More than 90 percent of the participants successfully completed the first year of the program, and all eligible students were placed in internships. The award-winning program receives support from the business community and a local summer youth jobs program.

In Oregon, a number of science programs are structured around indigenous sources like the marine biology center on the Oregon coast and the fossil beds in John Day. In Madras, Oregon, students in a botany class study the plant life of the region and also learn about Native Americans' use of those plants for medicinal and religious purposes. The course folds cultural studies into a science-oriented topic.

This is but a fraction of what is going on across our nation's educational systems. The quest for excellence continues everywhere.

Conclusion

Consensus about a topic as broad as education is probably impossible to obtain, but a few logical conclusions can be drawn from available evidence. That evidence overwhelmingly shows that schools are doing many things right, keeping their goals firmly in mind, seeking to meet the varying needs of a changing population of students. It isn't easy, but it's happening.

As for the myths about education—that students aren't doing as well as in the past, test scores are falling, more and more are dropping out, and fewer attend college—responsible people will do what they can to dispel these myths by citing the facts.

Denis Doyle put it this way: "What's right with American education? There's much that's right. It has a proud history and an honorable tradition, it is generously funded, it is staffed by men and women of good will, and it is resilient" (1992).

All this is true, and schools are putting forth a truly heroic effort to meet the challenges that face them, but society must realize that schools can't do it all. Doyle addresses this situation as well:

Washington must become part of the solution, and that means employment, welfare and health policy reform on a massive scale if any lasting improvements in the condition of children are to be made. And it should be clear to all that education reform will not reach the poorest of the poor unless their social conditions are ameliorated. (1993)

What's right with schools? So much is right. They are trying in the face of many obstacles to educate every child in this nation to reach his or her potential, according to our national philosophy. And they are succeeding in the majority of situations. What's needed now is concerted effort by all facets of society to reach "the poorest of the poor."

Bibliography

- Bennett, William. *To Reclaim a Legacy*. Washington, D.C.; National Endowment for the Humanities, 1984.
- Berliner, David C. "Educational Reform in an Era of Disinformation." Paper presented at the annual meeting of the American Association of Colleges for Teacher Education, San Antonio, Texas, February 1992. 97 pages. ED 348 710.
- _____. "Mythology and the American System of Education." *Phi Delta Kappan* 74, 8 (April 1993): 632, 634-40. EJ 461 098.
- Bloom, Alan. *The Closing of the American Mind*. New York: Simon and Schuster, 1987.
- Bracey, Gerald W. "American Students Hold Their Own." *Educational Leadership* 50, 5 (February 1993): 66-67. EJ 457 368.
- _____. "The Fourth Bracey Report on the Condition of Public Education." *Phi Delta Kappan* 76, 2 (October 1994): 115-27.
- _____. "NAEP and the Quality of Education." *Phi Delta Kappan* 76, 1 (September 1994): 84.
- _____. "The Second Bracey Report on the Condition of Public Education." *Phi Delta Kappan* 74, 2 (October 1992): 104-17. EJ 451 423.
- _____. "The Third Bracey Report on the Condition of Public Education." *Phi Delta Kappan* 75, 2 (October 1993): 104-112, 114-18. EJ 470 578.
- Carson, C.C.; R. M. Huelskamp; and T. D. Woodall. "Perspectives on Education in America: An Annotated Briefing." *Journal of Educational Research* 86, 5 (May/June 1993): 259-310. EJ 471 787.
- Carter, Stephen. "Portland's Seniors Suffer an SAT Setback." *The Oregonian* (August 25, 1994): A1, A18.
- Cohen, Deborah L. "Perry Preschool Graduates Show Dramatic New Social Gains at 27." *Education Week* XII, 30 (April 21, 1993): 1, 18-19.
- Davis, Rodney, and Kristen Amundson. *How Our Investment in Education Pays Off*. Arlington, Virginia: American Association of School Administrators, 1994. 21 pages.

- Denoyer, Richard A. "Response to the Task Force on School Governance." Paper presented at a meeting of the National Conference of State Legislatures, Cincinnati, Ohio, July 26, 1992. 8 pages. ED 349 686.
- Doyle, Denis P. "American Schools: Good, Bad or Indifferent?" *Phi Delta Kappan* 74,8 (April 1993): 626-31. EJ 461 097.
- Elam, Stanley M.; Lowell C. Rose; and Alec M. Gallup. "The 26th Annual Phi Delta Kappa Gallup Poll of the Public's Attitudes Toward the Public Schools." *Phi Delta Kappan* 76, 1 (September 1994): 41-56.
- Fox, Jim. "The Wrong Whipping Boy." *Phi Delta Kappan* 75, 2 (October 1993): 118-19. EJ 470 579.
- Frohnmeier, Dave. "Brawn to Brains: The Changing Nature of Oregon's Work Force." *The Sunday Oregonian* (September 4, 1994): B1, B4.
- Henry, William A, III. "In Defense of Elitism." *Time* 144, 9 (August 29, 1994): 63-65.
- Hirshberg, Charles. "Yearning to Learn." *Life* (September 1991): 22-32.
- Hodgkinson, Harold. "American Education: The Good, the Bad and the Task." *Phi Delta Kappan* (April 1993): 619-23. EJ 461 096.
- Horenstein, Mary Ann. *Twelve Schools That Succeed*. Bloomington, Indiana: Phi Delta Kappa Educational Foundation, 1993. 95 pages. ED 367 063.
- Houston, Paul. "SAT Scores: American Education's Success." *Education Outlook*. Reprinted from *Leadership News* (June 15, 1994).
- Houston, Paul D., and Joe Schneider. "Drive-by Critics and Silver Bullets." *Phi Delta Kappan* 75, 10 (June 1994): 779-82. EJ 529 510.
- Huelskamp, Robert M. "Perspectives on Education in America." *Phi Delta Kappan*, 74, 9 (May 1993): 718-21. EJ 463 876.
- Jaeger, Richard M. "Weak Measurement Serving Presumptive Policy." *Phi Delta Kappan* 74, 2 (October 1992): 118-26, 128. EJ 451 424.
- Kent, J. D. "A Not Too Distant Past: Echoes of the Calls for Reform." *The Educational Forum* 51, 2 (Winter 1987): 137-50. EJ 344 836.
- Kirst, Michael W. "Strengths and Weaknesses of American Education." *Phi Delta Kappan* 74,8 (April 1993):613-16, 618. EJ 461 095.
- Kozol, Jonathan. *Savage Inequalities: Children in America's Schools*. New York: Crown Publishers, 1991. 256 pages. ED 356 035.
- Levin, Henry M., and Carolyn Kelley. "Can Education Do It Alone?" The 1991 Dan Saks Memorial Lectures. *Economics of Education Review* 13, 2: 97-108.
- McMillen, Marilyn M.; Phillip Kaufman; and Summer D. Whitener. *Dropout Rates in the United States: 1993*. Washington, DC: National Center for Education Statistics, September 1994.
- Milwaukie High School; Clackamas Community College; Mt. Hood Community College; and Portland Community College. *Tech Prep Programs: Pathways to Success and Lifelong Learning. 1993-94 Student Guide*. Milwaukie, Oregon: Author, 1993. 145 pages.

- Parnell, Dale. "Revising Oregon Education." *The Oregonian*, Forum section (September 2, 1992): E9.
- Penning, Nick. "Independent Study Looks Beyond Rhetoric, Finds Gains." *School Administrator* 48, 9 (November 1991): 36-37. EJ 434 410.
- Perry, Nancy J. "What We Need to Fix U.S. Schools." *Fortune* 126 (November 16, 1992): 132-37.
- Ravitch, Diane, and Chester Finn. *What Do 17-Year-Olds Know?* New York: Harper and Row, 1987.
- Robinson, Glen, and David Brandon. "Perceptions About American Education: Are They Based on Facts?" Arlington, Virginia: Educational Research Service, 1992. 35 pages. ED 349 683.
- Rohlen, Thomas P. "Japanese Education: If They Can Do It, Should We?" *The American Scholar* (Winter 1985/86): 29-43. EJ 328 251.
- Stevenson, Harold. "Bracey's Broadides Are Unfounded." *Educational Leadership* 50, 5 (February 1993a): 68. EJ 457 369.
- _____. "Why Asian Students Still Outdistance Americans." *Educational Leadership* 50, 5 (February 1993b): 63-65. EJ 457 357.
- "Tests Flunk, Study Finds." *Science News* 142 (October 24, 1992): 277.
- Topolnicki, Denise M. "Why Private Schools Are Rarely Worth the Money." *Money* 23, 10 (October 1994): 98, 100-06, 108, 110, 112.
- Weikart, David P. "Quality Preschool Programs, A Long-Term Social Investment." Occasional Paper Number 5. New York: The Ford Foundation, 1989. 37 pages. ED 312 033.
- Whittington, Dale. "What Have 17-Year-Olds Known in the Past?" *American Educational Research Journal* 28, 4 (Winter 1991): 759-80. EJ 438 610.
- Young, Morley. "The Dark Underside of Japanese Education." *Phi Delta Kappan* (October 1993): 130-32. EJ 470 583.

Interviews

Michael Carroll, Superintendent, Mitchell School District, Mitchell, Oregon, phone interview September 13, 1994.

Robert Everhart, Dean, School of Education, Portland State University, personal interview September 8, 1994.

Stephen L. Griffith, Chairman, School Board, Portland Public Schools, personal interview August 25, 1994.

Judy Miller, Assistant Superintendent, Student Services, Oregon Department of Education, personal interview September 20, 1994.

Norma Paulus, Oregon State Superintendent of Public Instruction, personal interview September 20, 1994.

Ben Shellenberg, Superintendent, North Clackamas District 12, Milwaukie, Oregon, personal interview August 23, 1994.

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